SEPTEMBER 6, 1957

THE Lumberman

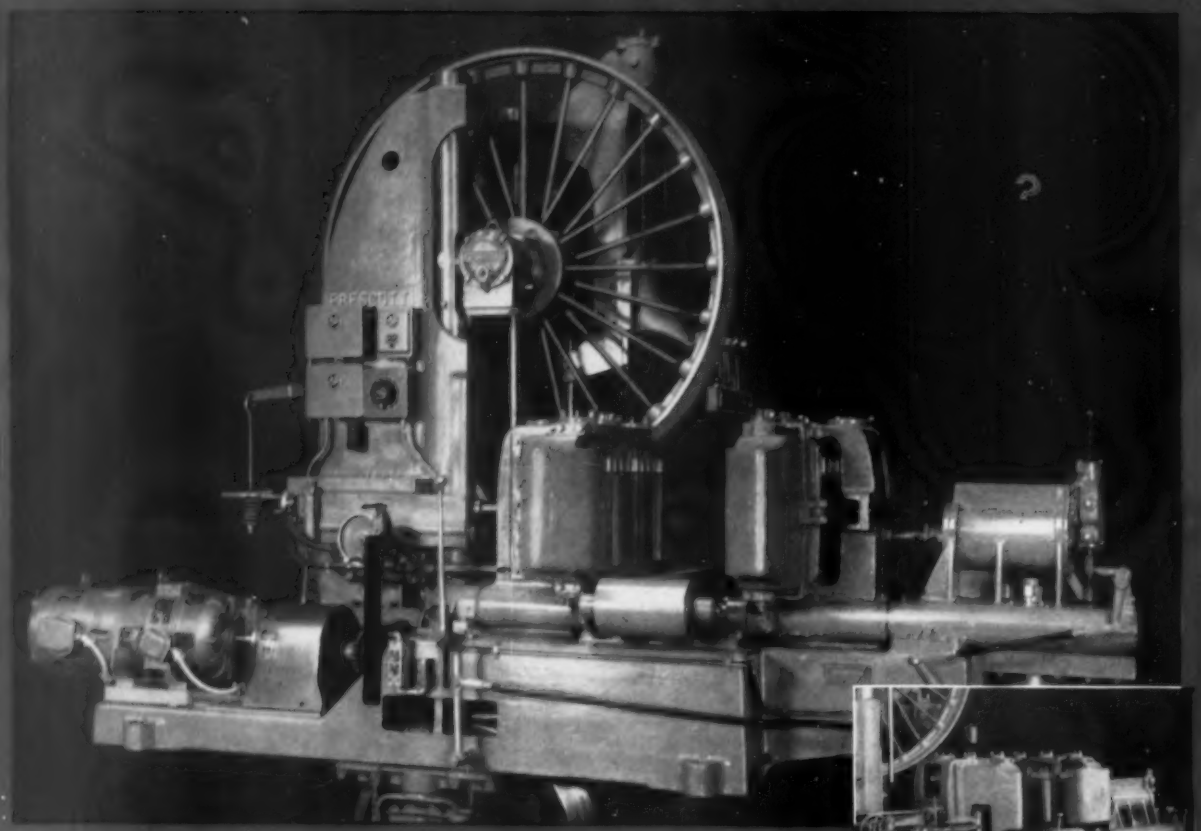
LUMBER PLYWOOD BOARD WOOD MANUFACTURING

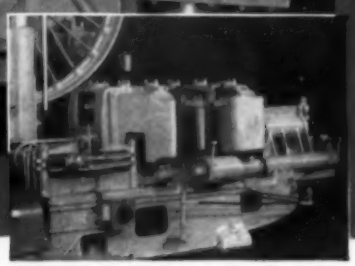
MORE DOLLARS PER BOARD FOOT

How Dwyer Lumber Co. combined systematic diversification with modern methods to extract the top return from every foot of material.

CEDAR SHAKES STAGE COME-BACK

An ever-increasing demand for these rugged shakes has enabled them to beat their way back to popularity and revive a pioneer industry.





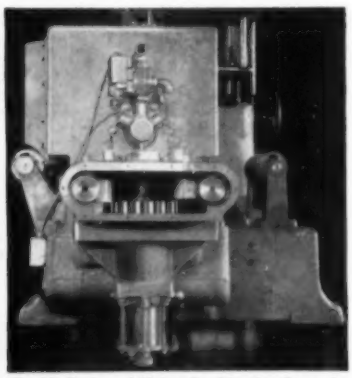
Heavy-Duty Feedworks — safe, vibrationless, extremely compact and precisely accurate. Eliminates wane and scant sawing.

PRESCOTT *vertical resaws...for the profitable production of more saleable lumber per log*

Increase your mill's output and reduce your operating expenses by installing a Prescott Vertical Resaw to get *all* the lumber out of *every* log. Precise mechanical accuracy gives you much better grade recovery — better sawing in all grades — and a high volume of smooth, straight, saleable lumber. Prescott Vertical Resaws minimize waste — practically eliminate downtime — deliver efficient, day-after-day performance for years — and return a greater net profit to you.

Here's how they do it — some of the major features of Prescott Vertical Resaws, combining the latest advances in resaw engineering and basic service-proved Prescott designs:

- Practical, Heavy-Duty Sizes — 5-6-7 Foot
- One-Piece Vibrationless Base
- Perfectly Balanced Wheels and Shafts
- Self-Aligning Roller Bearings
- Simplified, Ultra-Sensitive Knife-Edge Straining Device
- Compact, Heavy-Duty Feedworks System
- Continuously Variable Feedworks Drive
- Pre-Set or Lever Air Setworks
- Side Sawing and Self-Centering — Instantly Changeable
- Completely Self-Contained



Double Rack and Pinion Combination Setworks — spring-proof and instantly changeable from side sawing to self-centering.

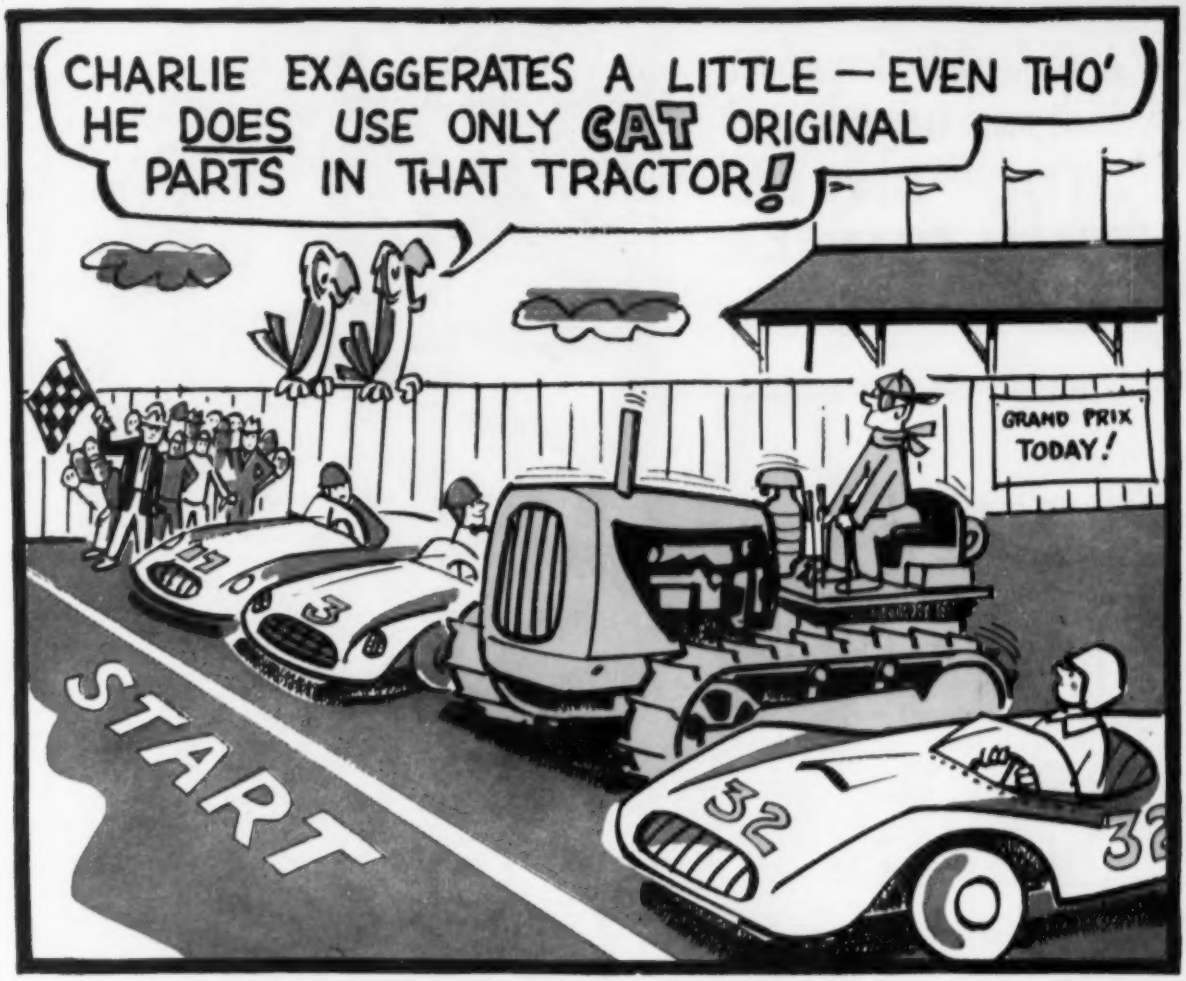
New . . . Illustrated Literature containing complete technical data and detailed specifications is now available. Call, wire or write for this comprehensive material on Prescott Vertical Resaws or the services of one of Prescott's experienced sawmill engineers.

For Profitable Sawmill Operation... **SPECIFY**

PRESCOTT

HIGH EFFICIENCY, HEAVY-DUTY SAWMILL MACHINERY

THE PRESCOTT COMPANY, *Menominee, Mich.*



Are they really as much alike as they look? Steel used in industrial standard bolts must withstand 120,000 pounds pull per square inch—CAT* bolts must withstand *at least* 151,000 PSI. Same with other Cat original track parts—higher standards. With "look-alike" track parts, who knows? Be sure to get parts you can trust—from your Caterpillar Dealer. He always has *exactly* the part you need. Call on him anytime.

Caterpillar Tractor Co., San Francisco, Calif.; Peoria, Ill., U. S. A.

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A worth-while story about Shell men, techniques and

SHELL RIMULA OIL

Oil foils sneak thief...

SILENT THIEF of engine life is "Acid Action"—result of harmful acids formed during a diesel engine's combustion cycle. A bigger wear factor than friction, acid action attacks piston rings and cylinder walls.

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Rimula is the standard of quality in its field, the only oil of its type which fully meets—year after year—the requirements for America's leading diesel engines.

Chances are Shell Rimula or another Shell product is the right answer to your lubrication problems. These fine products are developed by Shell Research—a 1500-man team strong on lubricant experience. Why not put that experience to work this week?

VOLUME 84 • NUMBER 10

September 6, 1957

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Publisher and General Manager

THE Lumberman

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A MILLER FREEMAN PUBLICATION

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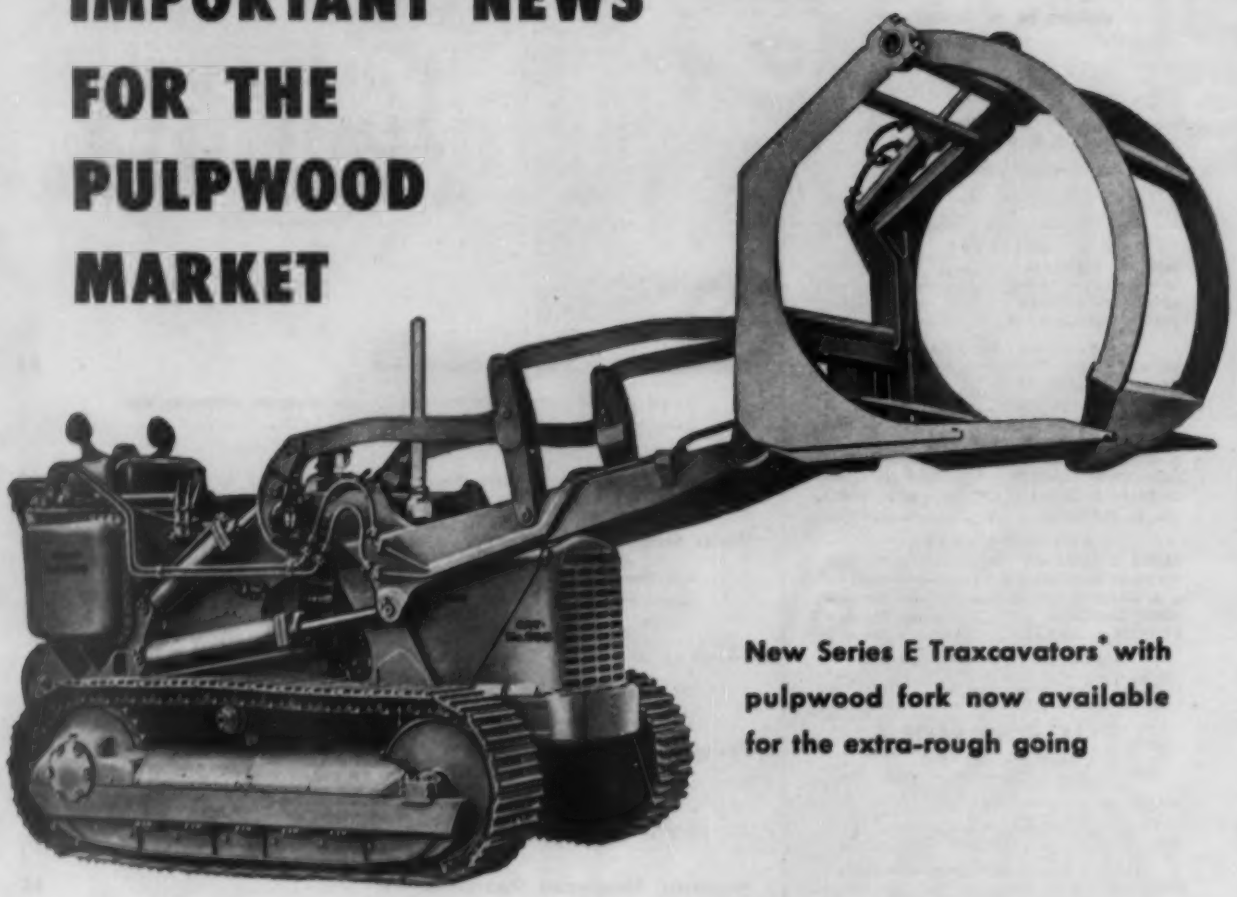
IMPORTANT NEWS FOR THE PULPWOOD MARKET



New Series E Traxcavators* with pulpwood fork now available for the extra-rough going

The tough reliability of the No. 955 and No. 977 has been field-proved. In the new Series E (available with pulpwood fork), these Cat-built Traxcavators give even greater performance in applications that put top stress on the guts of your equipment.

The rugged new models have a heavy-duty, extra-sturdy undercarriage for longer life, lower maintenance costs, and better job production when the going is really rough. Coupled with their dependable power—

You get—

NEW, heavier idlers

NEW solid sprockets

NEW and tougher track rollers with frames and guards of heavier construction

MORE ground clearance

LOWER center of gravity for better handling and stability

LOWER transmission speeds for more bucking power

For details on these improved Traxcavators, phone your Caterpillar Dealer—same man you call for expert service and CAT* replacements parts that don't let you down.

Comparative Fork Specifications	No. 955	No. 977
Approximated pulpwood cord capacity (at 4500 lb./cord)	1.1	1.9
Forward reach on ground ahead of front bumper	82"	88"
Overall width of fork	63½"	80"
Maximum front dump angle (top position)	50°	49½°
Overall length—Traxcavator and fork—fork on ground	18' 4"	19' 1"

Caterpillar Tractor Co., San Francisco, Cal.; Peoria, Ill., U.S.A.

CATERPILLAR*

*Caterpillar, Cat and Traxcavator are Registered Trademarks of Caterpillar Tractor Co.

ONE GOAL: To concentrate our capabilities, resources and experience on the design, manufacture, distribution and service of job-tested heavy equipment.

INDUSTRY TRENDS

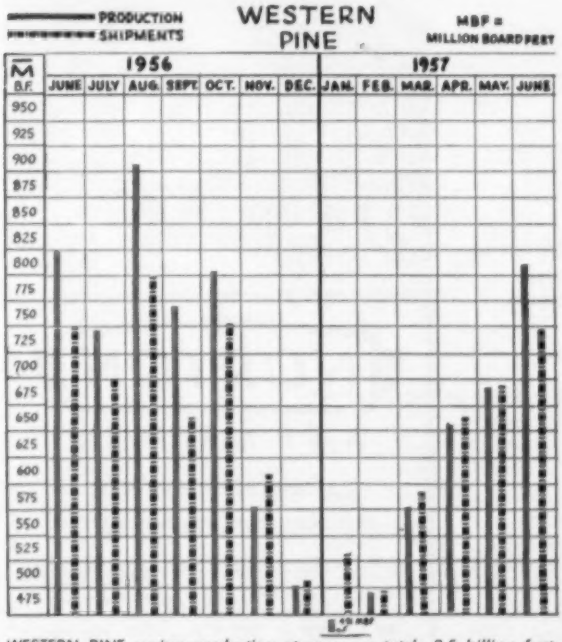
NATIONAL LUMBER PRODUCTION at mid-year stood at 17 billion feet, down 9% from the first six months of 1956. Shipments are down 10% from a year ago, new orders are off 8%. Gross mill stocks, which have been leveling off in recent months, still total 9.9 billion feet, 15% above a year ago. Unfilled order files at the end of June totaled 2 billion feet. In June, orders and shipments were exceeding production.

SOUTHERN PULPWOOD OUTPUT in 1956 was at a record level, made up 57% of the nation's total. The 20.3 million cords produced exceeded 1955 by 11%. Georgia was the leading producer at 4 million cords, followed by Alabama and Mississippi at over 2 million. An increase is noted in the use of hardwoods with 2.9 million cords of hardwood timber cut for pulpwood, 11% more than in 1955. Use of wood residue for pulp increased 76% over 1955, represents 3% of the total.

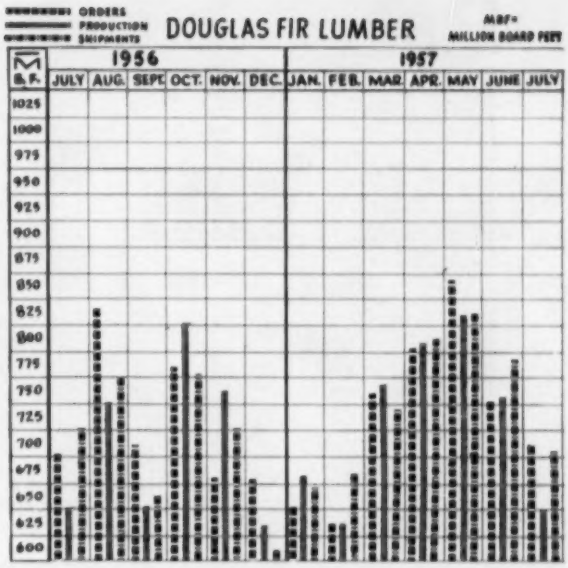
SOUTHERN PINE lumber production at mid-year is running 3% behind a year ago. However, orders booked are 3% ahead of 1956 and shipments are the same.

PULP PRODUCTION in the United States is running about 1.8% behind a year ago. Domestic consumption is down 2.7%, imports down 7.3%. American producers turned out 9.3 million tons of all grades of pulp in the first five months of the year. Current production and use exceed any previous period except in 1956.

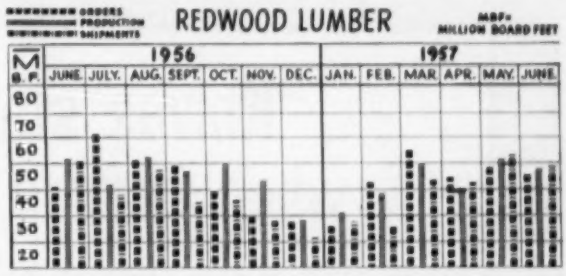
BOX SHIPMENTS from the Pacific Northwest in July are up 6.5% over a year ago, but are down 6.8% from the first seven months of the year. Shipments of shook from the area—California, Arizona, Colorado and most of Oregon—totaled 43,569,000 feet in July, compared to 40,893,000 feet a year ago. This is for 41 plants. Shipments to date total 198,818,000 feet, compared to 213,470,000 feet at the same time in 1956.



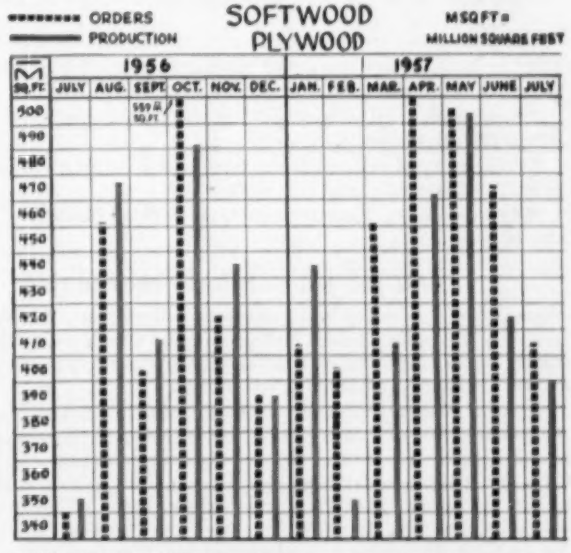
WESTERN PINE region production at mid-year totals 3.5 billion feet, compared to 3.9 billion feet in 1956. Shipments total 3.6 billion feet, compared to 3.98 billion a year ago. Gross stocks on June 30 totaled 2 billion feet, compared to 1.75 billion a year ago.



DOUGLAS FIR region production at the end of six months totals 5.2 billion feet, compared to 5.4 billion feet a year ago. Orders to date are 5.2 billion feet. Unfilled orders at the end of May total 620 million feet; gross stocks are at 1 billion feet.



REDWOOD production and shipments continue behind a year ago. Production is down 18%, shipments 17%. Orders in June are down 2.4 million feet from May, 6.6 million from a year ago. Orders on hand are 53.6 million, stocks 404 million.



DOUGLAS FIR PLYWOOD production at the end of 32 weeks totals 3.3 billion square feet, up 4.5% from a year ago. The weekly production average is 102.3 million square feet, compared to 97.9 million square feet a year ago. Unfilled orders are at 288.8 million square feet.

Knives stay sharp longer when they're sharpened cooler

32 ALUNDUM* G BOND wheels add the "TOUCH of GOLD" that protects high speed steels

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ACME STEEL **STEEL STRAPPING** bundles railroad ties for efficient handling at wood treating plant. *(Idea No. U6-25)*

ACME STEEL **STEEL STRAPPING** secures truck shipments of lumber for job-site delivery. *(Idea No. U5-2)*

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Apply Acme Steel unitizing, packaging and car bracing Ideas to your lumber industry operations. Get the *best* Ideas for safe secure packages and shipments that result in greater handling speed and labor-material economies as well as important savings and increased customer satisfaction. Your Acme Idea Man can be your source of the *best* Ideas, and he's located near your plant.

Your Acme Idea Man is thoroughly experienced in product protection for all phases of the lumber industry. He is immediately available to discuss your specific problems and provide hundreds of performance-proved Acme Steel Strapping Ideas, without cost or obligation. The seven Ideas on these pages are included among the Ideas-In-Action Reports your Acme Idea Man will be glad to show you. Among these many Reports—all of which have been developed from actual experiences of scores of users—are certain to be Ideas that can be applied to your problems, for better, faster, more economical product handling, protection and storage.

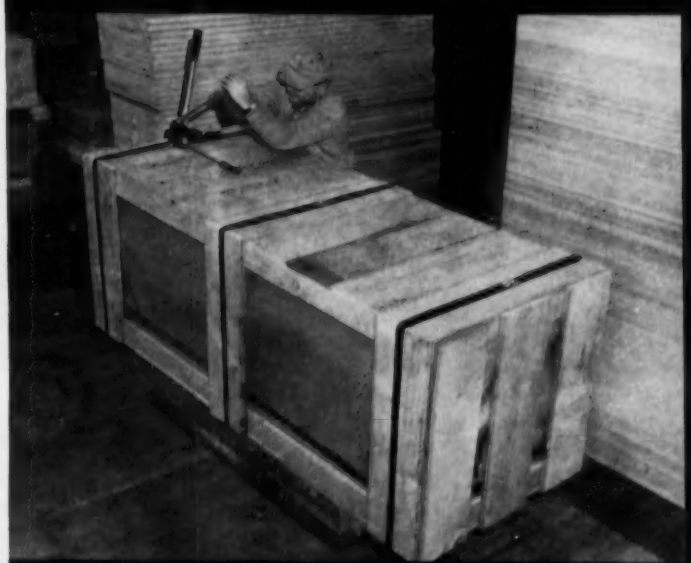
Your *Acme Idea Man can be contacted at the nearest Acme Steel Company office. Simply look under "Steel Strapping" in your classified telephone directory, or send the coupon for full facts and information.**

ACME STEEL **STEEL STRAPPING**

ACME STEEL **STEEL STRAPPING** packages lumber for faster, more economical handling and storage. *(Idea No. S3-31)*

ACME STEEL **STEEL STRAPPING** machine bundles millwork in secure packages for fast handling. *(Idea No. S2-7)*

ACME STEEL **STEEL STRAPPING** unitizes laminated rafters for safe, efficient delivery. *(Idea No. U6-24)*



ACME STEEL **STEEL STRAPPING** reinforces packages of interior doors for export shipment. *(Idea No. U7-1)*

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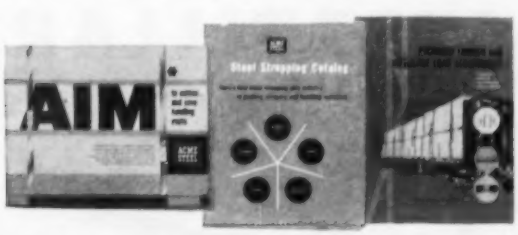
These three information packed Acme Steel Idea Books are available to you on request. They will provide dozens of clues to better ways to package and protect your products and plant output.



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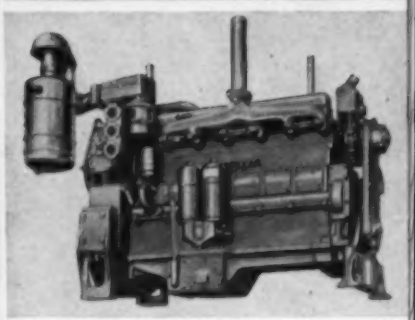

The Cat D318 Engine, one of the smaller units in the modern heavy-duty Caterpillar power line, is rated at 137 HP (maximum output capacity).

The CAT* D318 Engine in Mario R. Contigiani's sawmill powers a 48" saw-edger-clipper, conveyor and blower. It works 8 hours a day, 5 days a week, 12 months a year. Production of pine, hemlock and mixed hardwoods averages 8,500 bd. ft. a day. Mr. Contigiani, summing up the D318's performance, says: "Trouble-free fuel injection system . . . dependable . . . easy to maintain . . . ease of operation . . . no trouble starting."

You can count on all these important characteristics —and *more*—in *every* engine in the modern heavy-duty Caterpillar power line. They pay off in profitable production. For example, exclusive Caterpillar single-orifice fuel injection valves, combined with the pre-combustion chambers, permit the use of a wide range of fuels including low-cost No. 2 furnace oil *without fouling*. Maintenance is minimum. The fuel system requires no adjusting. There are no cylinder ports to clean. And each Cat Engine, with its 4-cycle design, responds quickly to sudden snags with sustained power for smooth cuts!

Certified power for Cat Diesel Engines

There's no guessing or gambling when you invest in a Caterpillar Engine. Each is honestly rated. The power promised is the power delivered—and it's backed by a certificate signed by Caterpillar and notarized. You get a certificate with every Cat Engine, from the smallest (65 HP maximum output capacity) to the largest (650 HP maximum output capacity).

Your Caterpillar Dealer, a power expert, offers you round-the-clock availability of service and parts you can trust. Take your power problems to him. Let him show you the *certified* power plant that will do the most efficient job for you!

Caterpillar Tractor Co., San Francisco, Cal.; Peoria, Ill., U.S.A.

CATERPILLAR*

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significant industry news

BOISE CASCADE PLANS PULP, PAPER MILL IN WASHINGTON . . . A multi-million dollar pulp and paper mill and a container plant are planned by Boise Cascade Corporation at Attalia on the Columbia River, 30 miles west of Walla and 14 miles south of the Pasco-Kennewick, Richland area. The pulp and paper mill will be in production in 18 to 24 months. The container plant will probably be operating in April, 1958. Present plans are for two separate corporations operating as wholly owned subsidiaries of Boise Cascade. They would be Columbia Kraft for the pulp and paper mill, Columbia Container for the container plant. Company officials emphasize that the installation will provide a step toward more complete utilization of timber products since the major materials for its operation will be timber and mill residues that otherwise would be burned as waste.

B. C. LUMBER EXPORT PICTURE BRIGHTENS . . . A combination of events are expected to increase B. C. lumber exports sales, especially in the United Kingdom. Factors involved are a decline in wheat shipments which dropped ocean cargo rates more than 40% since the beginning of the year making B. C. lumber competitive in the U. K. market, and the appearance of a shortage in the British lumber market. In recent months, the U. K. has been using lumber from its emergency stockpile and it is estimated that this has now been reduced to 80 million feet.

CALUMET & HECLA NAMES NEW MANAGER . . . G. A. Houghton, Jr., formerly assistant general manager of the forest industries division of Calumet & Hecla, Inc., Chicago, Ill., has been named general manager, succeeding his father, G. A. Houghton, Sr. who has rached the company retirement age. Houghton has previously been associated with Goodman Lumber Co., Goodman, Wis., an operating unit of the forest industries division, and as general manager of Haskelite Manufacturing Co., Marquette, Mich. Houghton, Sr., will continue with the company as assistant to the president.

EXECUTIVE PROMOTIONS AT VALSETZ LUMBER CO. . . . Herbert A. Templton, previously president of Valsetz Lumber Co., Portland, Ore., is now chairman of the board and is succeeded as president by Hall Templeton who was executive vice-president. James E. Bryson, formerly secretary-treasurer, becomes executive vice-president. Three managers of divisions, and Gene C. Brewer, U. S. Plywood Corp., become vice-presidents. The managers, H. F. Thomas, Valsetz division, W. E. Irwin, Western Pine-Lincoln division and M. Gale Beals, Mount Emily, continue as managers. Other firm employes moved up to more important posts are Lawrence D. Porter as assistant secretary and E. W. Cleary as assistant treasurer.

PACIFIC LUMBER INSTALLING HYDRAULIC BARKER . . . Construction work has started at Scotia, Calif., on a barker installation for the Pacific Lumber Co. which is hailed as the largest in the world. The project, including log handling facilities, will cost about $1.5 million. This will be the first hydraulic barker in California. In operation, peeled fir bark will be converted to fuel, redwood bark will be used in the manufacture of Palco wool, an insulation product. Construction will take at least a year.

FOREST GROVE, ORE. SAWMILL SOLD . . . The Carnation mill of Gales Peak Lumber Co. near Forest Grove, Ore. has been sold to a new firm, Forest Grove Lumber Co., and has been placed in operation. The mill had been down since last November. The new firm is headed by E. J. Linke, Carlton, Ore., long-time sawmill operator in the area. Manager of the sawmill will be Carl Burnard, formerly with the Alder Creek Lumber Co. at Cherry Grove, Ore. The plant has a production capacity of 130,000 feet a day in a resaw operation.

B. C. FOREST INDUSTRY DOLLAR VOLUME in 1956 was about $3 million less than in the record year of 1955, statistics from the provincial government show. Estimated value of forest production in all divisions was $628.6 million. Pulp and paper, plywood and poles and pilings did show increases. Timber cut was just over 1 billion feet, a record. Decline in value of lumber production was due to lower prices. The government observes that "the industry on the whole had a good year."

DR. NICHOLAS V. POLETIKA is new director of research and development for the Union Lumber Co., Fort Bragg, Calif. He succeeds Ray E. Shreck who has retired. Poletika was most recently with the Timber Engineering Co. where he was director of research. His duties included basic research, applied research, product development, marketing development, consultation on production difficulties and plant management for the forest products industry.

THE NATIONAL LUMBER EXCHANGE, to be launched officially October 21, following a 15-day trial run, unveiled their operational plan. A new method of marketing lumber, the exchange board and main office are in the Terminal Sales Building in Portland, Ore. Based on the exchange system used for commodities such as cotton, corn and wheat, the operation is tailored to lumber requirements. The Exchange will be a market place where sellers may dispose of their lumber and buyers may purchase their needs at lowest transaction costs. Members will be sawmill operators and wholesalers who will pay $5 per car of lumber listed for sale and $5 per car of lumber listed for purchase. Factoring service is to be optional through Walter E. Heller & Co. of Chicago. Current prices will be posted on the board constantly. A closed corporation, officers are: Frederick C. Talbot, chairman of the board; H. E. Van Allen, president; Howard R. Baker, executive vice president; J. Paul George, vice president; F. Lyle Baker, secretary.

U. K. SOFTWOOD LUMBER CONTRACTS by importers in the first six months of 1957 totaled 2.5 billion feet, an increase of 400 million feet over the previous year. Canadian sales total 340 million feet, Swedish 780 million feet, Russian 530 million feet and Finland 442 million feet, United States 20 million feet. Russian softwood lumber sales to Britain have now reached 560 million feet for delivery this year, the best figure since 1938. Imports of sawn hardwoods from United States in the first half of the year are 257,000 cubic feet, compared to 440,000 cubic feet a year ago.

GROWING IMPORTANCE OF PULPWOOD in Washington has prompted the Institute of Forest Products to review the study made of this industry in 1950. The importance of the industry to the state and its extreme growth in the past several years are pointed up by the fact that in the past year paper pulp produced in the state had a value of almost $400 million, one-third greater than the value of lumber produced in the same period.

PLYWOOD PLANT CONSOLIDATES OPERATIONS in new modern factory building. The Welsh Plywood Corp. at Memphis, Tenn., one of the country's larger producers of prefinished plywood paneling, has its new plant under construction to consolidate both its moulding and plywood operations under one roof.

OPTIMISM OVER THE LUMBER INDUSTRY'S FUTURE is voiced by Owen R. Cheatham, president of the Georgia-Pacific Corporation, who expects his company to record sales of $150 million this year, and looks for further market expansion. He sees housing starts totaling 1 million in 1958, up to the 1955 boom level by 1959. He reports the firm's $22 million kraft paper mill at Toledo, Ore., will be in production by January, 1958. His company also plans two or three other projects. If it sells its Bellingham, Wash. plant, it will probably build a new plant near Eureka, Calif.

B. C. LUMBER IS MOVING TO NORTHWEST STATES as the result of new rail rates which open up new territory in Wyoming and Colorado for British Columbia's rail-shipped lumber. Lumber is now moving from the central interior of British Columbia by car barge from Squamish, on Howe Sound, to Seattle, Wash., for distribution by rail to northwest states.

RECEIPTS FROM NATIONAL FORESTS of the northern region with headquarters at Missoula, Mont., were nearly $9 million for the fiscal year of 1957. This is an increase of $400,000 over the 1956 fiscal year. Sales of 1 billion board feet of national forest timber and ½ million Christmas trees amounted to $8,485,349. The Kootenai and Kaniksu forests were $1,787,963 and $1,244,707 respectively. Four other forests in the region had receipts of nearly $1 million. Twenty-five per cent of receipts are returned to the counties in which forests are located.

LEASING OF PEAK PLYWOOD CO. veneer plant at Corvallis, Ore., by Plywood Products also of Corvallis, was recently announced. A new corporation, Benton Veneer Corp., will be established for the plant. The plant was leased from T. J. Starker, with option to purchase by Plywood Products owners, Jack Brandis, C. S. Robinson, Don Johnson and Roy Foy. Production will start the middle of September.

AN UPSWING IN THE LUMBER BUSINESS is anticipated in 1958 by the lumber department of Anaconda Copper, Missoula, Mont. The optimistic forecast is based on the fact that contracts are now running 5% ahead of last year. The company anticipates a long period of steady operation.

NEW VENEER PLANT READIED at Carlton, Ore. The Willamette Valley Lumber Co. has completed construction of its new $500,000 veneer plant which started operation the first of September. Veneer goes to the company's plywood plant at Dallas, Ore.

NEW OPERATIONS IN OREGON who recently filed articles of incorporation include the Paul Workman Lumber Co., of Medford, filed by Cliff Ouellette, Paul A. Workman and Mrs. Ruth Foote. Second firm also at Medford was the Roberts Logging Co., filed by Lloyd O. Roberts, Brian Mullen and Warren G. Lesseg.

CARL R. STOBBE has been appointed by Roseburg Lumber Co., Roseburg, Ore., to act as its field representative in New England and East Coast states as far south as Virginia and West Virginia. The firm recently named Dewey B. Nelson to a similar post in the Midwest in a move to expand its field representation.

JUDD GREEMAN, former president and present chairman of the board of the National Lumber Manufacturers Association, died at his home in Portland, Ore. Aug. 27. A colorful figure in the lumber industry, he was retired general manager of what is now International Paper's Long-Bell, Vernonia, Ore. division. He was a senior vice-president of West Coast Lumbermen's Association, president of the Lumbermen's Industrial Relations Committee, director of Northwest Oregon Forest Protective Association and held many other industry posts.

CARNEY J. CAMPION is the new secretary of the Redwood Region Conservation Council, Ukiah, Calif., succeeding Ben S. Allen who had originally selected him as a field representative for RRCC in 1951. Campion has also served in a similar position for the Conservation division of the California Redwood Association.

OREGON LOG PRODUCTION OFF for the calendar year of 1956 is reported by State Forester Dwight L. Phipps. This leading lumber producing state had a log cut of 9,335,810,000 board feet during the calendar year just past, 384 million feet below the previous year and nearly a half million feet under the top year of 1952 which had a record cut of 9,802,471,000 board feet. Largest cut in 1956 was in Douglas County which produced 1,776,297,000 board feet. Lane County was next with 1,107,384,000 board feet.

SALES HIGHEST BUT PROFITS DOWN is reported by U. S. Plywood Corp., for the first three months ending July 31, company fiscal year. Total sales of $52,591,000 for the quarter were highest in company's history. Previous first quarter sales were $51,012,000. Net earnings were $1,806,000 after estimated income taxes of $1,182,000. Net earnings after preferred dividends were equal to 71 cents per share, compared to $1.06 per share first quarter of 1956.

DEAN B. THATCHER has been named general manager of Masonite Corporation's hardboard plant at Ukiah, Calif. He has been with Masonite since 1948, most recently was director of industrial engineerings for plants at Laurel, Miss., and Ukiah.

MAX K. BLACHLY has been appointed district sales representative for the Minnesota and Ontario Paper Company's National Pole and Treating Division. To headquarter in Chicago, he will replace Frank M. Anderson who resigned to enter his own business. Blachly was formerly with Koppers Company, Inc., as district sales representative.

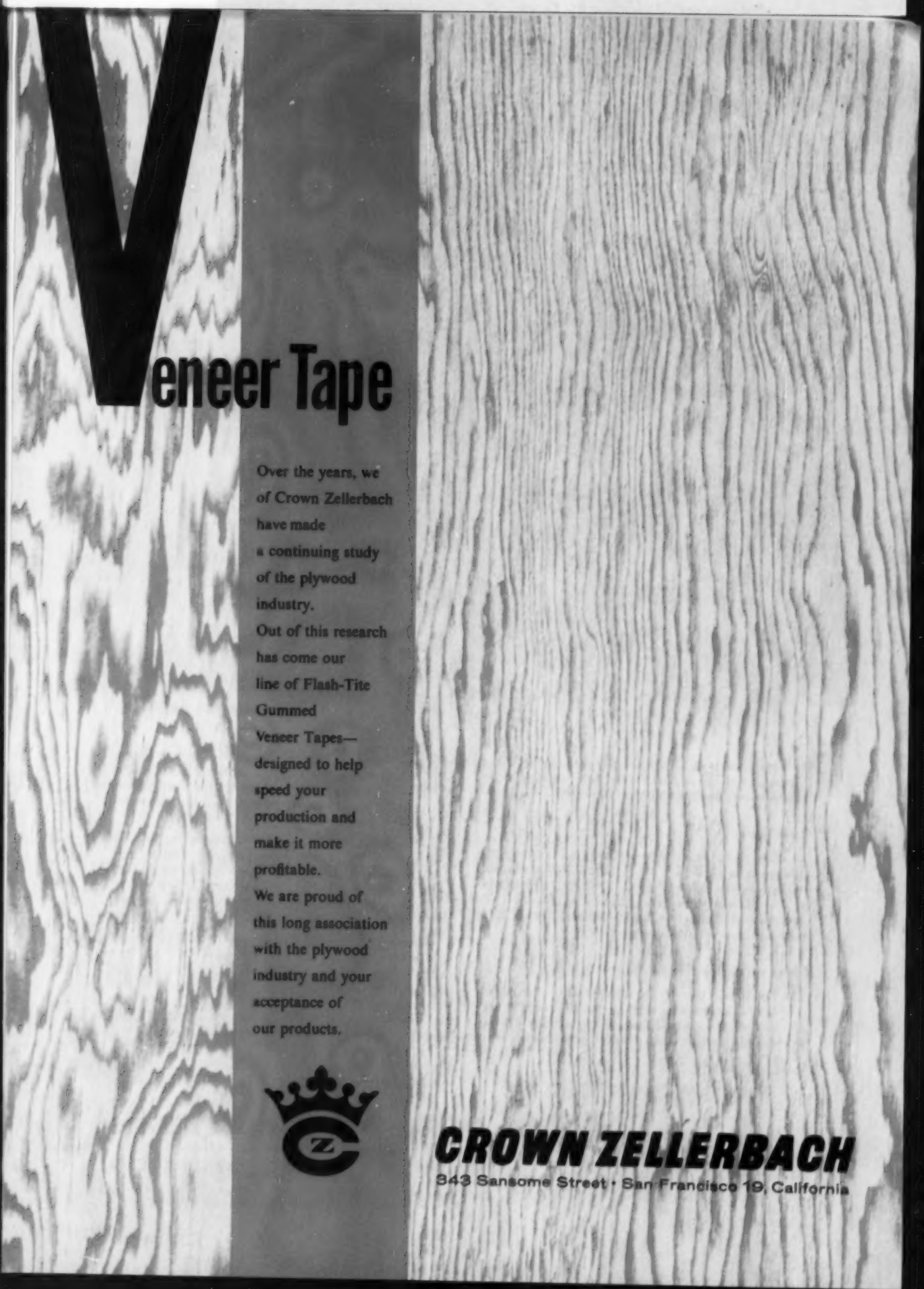
SOUTHERN PULPWOOD HARVEST AT RECORD. The year just past proved to be the seventh consecutive year that southern plywood production has broken previous records. Harvest of 20.3 million cords during 1956 was 11% more than 1955, and accounted for 57% of the pulpwood used in the nation during the year. Roundwood made up 19,685,800 cords; chipped residues from wood-using industries totaled 659,100 cords, double the 1955 volume.

TIMBER SALE RECEIPTS REACH $56,500,000 from the 19 national forests in Oregon and Washington, covering 55 counties in the two states. This is for the fiscal year ended July 1. Timber sales accounted for 90% of the receipts, livestock grazing and other forest uses the balance. Willamette National Forest was leading revenue producer in Oregon with $9,914,296. Gifford Pinchot National Forest in Washington reached $6,105,414, for tops in that state. Some $14,000,000 will be divided among the counties. Announcement was made by regional forester J. Herbert Stone, who pointed out the total was an increase of $2 million over last year.

DR. ROBERT J. VAN NOSTRAND has been named assistant sales manager of the Pulp and Floc Sales division of Brown Company and will headquarter in the firm's general offices at Boston, Mass. He has been in the Brown organization since 1943.

ERNEST R. DESILVIA is new assistant regional forester in charge of the division of fire control with the U. S. Forest Service at Missoula, Mont. He succeeds Alfred E. Spaulding who recently transferred to the Pacific Northwest Region in Portland, Ore. DeSilvia most recently was supervisor of the Mississippi National Forest.

KEITH GORDON has joined Western Lumber, Inc., Medford, Ore., where he will be active in wholesaling all lumber items handled by the firm. Industry background includes service with Fruit Growers Supply Co. and Superior Lumber Co. in California.



Veneer Tape

Over the years, we of Crown Zellerbach have made a continuing study of the plywood industry.
Out of this research has come our line of Flash-Tite Gummed Veneer Tapes—designed to help speed your production and make it more profitable.
We are proud of this long association with the plywood industry and your acceptance of our products.

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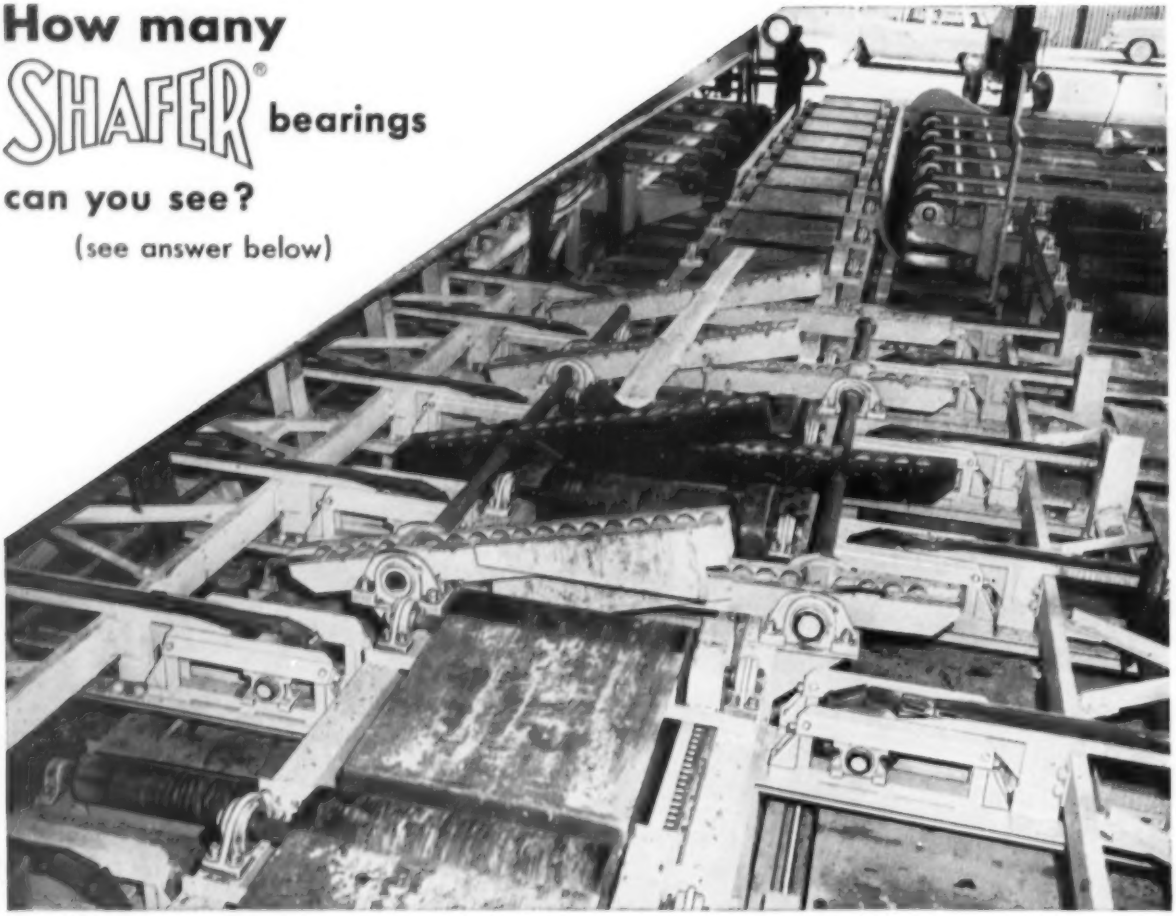
How many SHAFER® bearings can you see?

(see answer below)



Designed and built to withstand severest conditions of dirt and shock loads, Shafer Self-aligning Bearings are used throughout this modern sawmill.

How Many?

In this one photo of the vertical resaw cant transfer conveyor alone, there is either a Shafer Normal or Heavy-duty Pillow Block, or a Heavy-duty Take-up and Frame Unit—everywhere a shaft turns. We counted only those we could see and found more than 70. How many can you count?

Clues on Where to Look

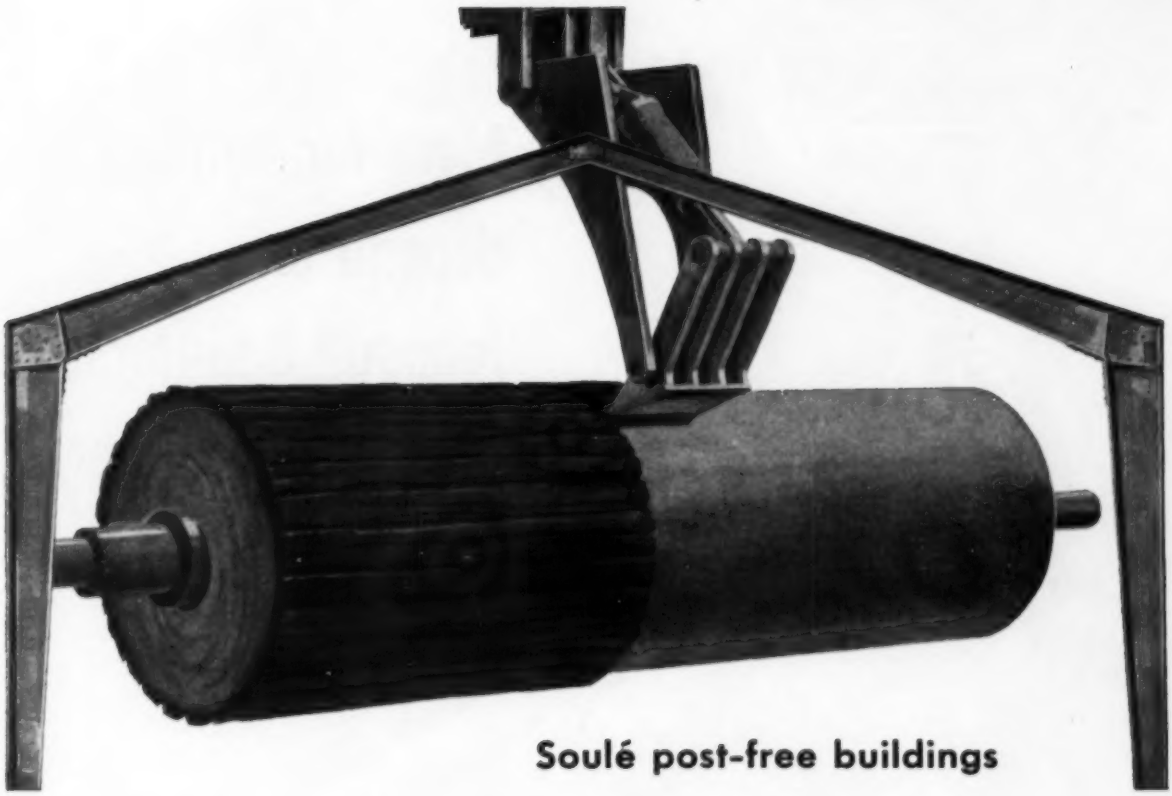
1. Look for the spots where moderate shock loads, average operating conditions and normal shaft expansion can be expected and you'll find Shafer Normal-duty Pillow Blocks.
2. Look for the points where you'd expect severe shock loads and you'll find Shafer Heavy-duty Units that can take those radial and thrust shock loads—even under misalignment—and have capacity to spare.
3. Look for the places where chain take-ups have to take a terrific pounding, yet deliver full capacity and long life. At every one you'll find heavy-duty Shafer Take-up and Frame Units in welded steel frames capable of taking full load in either direction.

Throughout your mill where operating conditions are severest, you'll find a spot where Shafer design and performance can be counted on. Ask your Shafer or CHAIN Belt Representative to help you make the best choice—or write today for Shafer Bearing Industrial Catalog, Shafer Bearing Division, CHAIN Belt Company, Downers Grove, Illinois.

CHAIN BELT COMPANY

SHAFER BEARING DIVISION

DOWNERS GROVE, ILLINOIS



Soulé post-free buildings

More usable plant area for profitable plywood production

Soulé clear span steel buildings help you get efficient plywood plant design and equipment placement. There are no interior support posts to waste space. Barkers, lathes, tray systems, dryers and clippers can be placed strategically to speed production. Actually every square foot of building space is usable—wall to wall all the way to the ridge! Soulé Buildings are mass-produced for low costs in sizes to fit any need (clear-widths from 32′ to 90′). Send for catalog and price data.

Rugged, fire safe Soulé buildings used by Bate Lumber Co., Merlin, Ore.

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LEADER IN STEEL BUILDINGS

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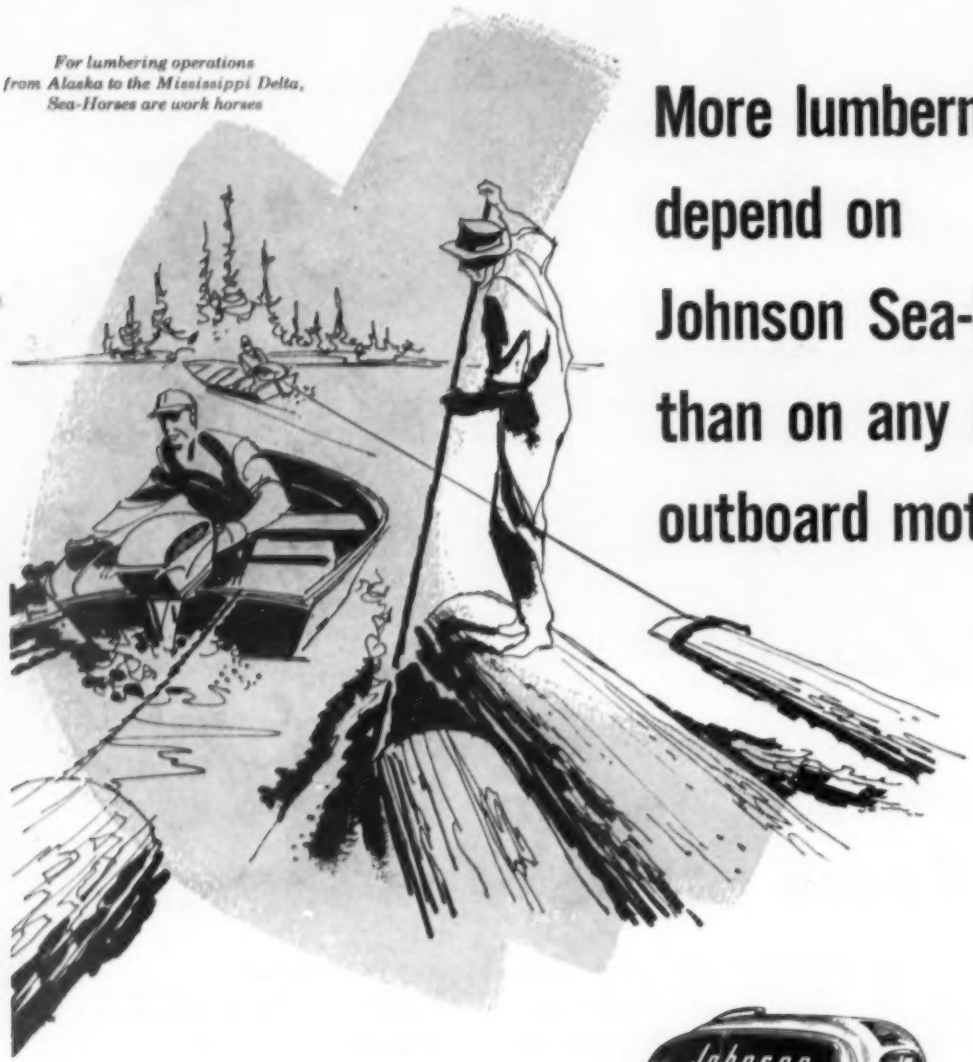
For lumbering operations from Alaska to the Mississippi Delta, Sea-Horses are work horses



More lumbermen depend on Johnson Sea-Horses than on any other outboard motor

New for '57—"sweetest-running Johnsons ever"

There are two new power classes in our '57 line—with five load-loving Johnsons now delivering 18 or 35 hp. Nine new motors in all, each now equipped with a drive pin saving slip-clutch. And each protected against salt water corrosion, so no flushing is necessary.

Johnson leadership in commercial outboard sales and use stems from one fact . . . Johnson dependability. Hour after hour, year after year, Sea-Horses deliver the goods—at all speeds and under all conditions of load. See your Johnson dealer now. He's listed in the Yellow Pages.

FREE! 1957 Sea-Horse catalog, write: Johnson Motors, 256 Pershing Rd., Waukegan, Ill. (Div. of Outboard Marine Corp. In Canada: manufactured by Johnson Motors, Peterborough, Ont.)

FOR '57! A WIDE AND WONDERFUL CHOICE!

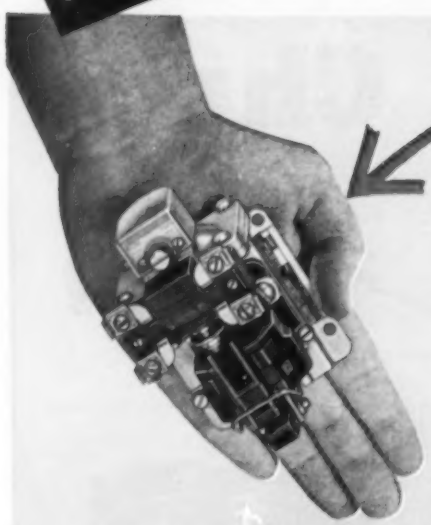
Golden Javelin*	35 hp.	$625
Sea-Horse 35*	35 hp.	585
Sea-Horse 35	35 hp.	495
Sea-Horse 18*	18 hp.	475
Sea-Horse 18	18 hp.	395
Sea-Horse 10	10 hp.	340
Sea-Horse 7½	7½ hp.	260
Sea-Horse 5½	5½ hp.	230
Sea-Horse 3	3 hp.	155

**12-volt electric starting (new quick-charging 10-ampere generator with automatic voltage regulator available as accessory on first two models). Prices f.o.b. factory, subject to change. OBC certified brake hp at 4000 rpm (18s and 35s at 4500)*

A million Sea-Horse owners will tell you ***JOHNSON KNOWS BEST***

What's Your Timing Problem?

-ONE OF THESE TIMERS WILL DO YOUR JOB *Exactly!*



NEW...Type A

REALLY SMALL IN SIZE AND COST!

for applications requiring shorter timing periods, ±15% accuracy and no interlocks

Type B

MACHINE TOOL STANDARD FOR MORE THAN 20 YEARS!

for applications requiring timing periods up to 3 minutes, maximum accuracy and 1 or 2 instantaneous interlocks

COMPARISON	TYPE A	TYPE B
Timing Period	.2 to 1 min.	.2 to 3 min.
Accuracy	±15%	±10%
Interlocks	None	Max. 2 Double Circuit
Panel Space	2⅛" x 4"	2½" x 7⅛"
Convertible Delay-On • Delay-Off	Yes	Yes
Maximum Voltage AC—DC	600 V. AC only	600 V. AC 250 V. DC

Write for Timer Bulletin 9050

Address Square D Company, 4335 Valley Boulevard, Los Angeles 32, Calif.

NOW...EC&M PRODUCTS ARE A PART OF THE SQUARE D LINE

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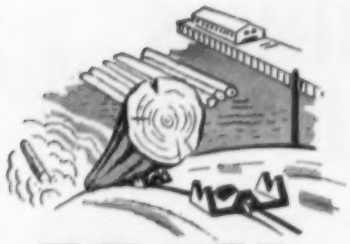

From pond to sorting table

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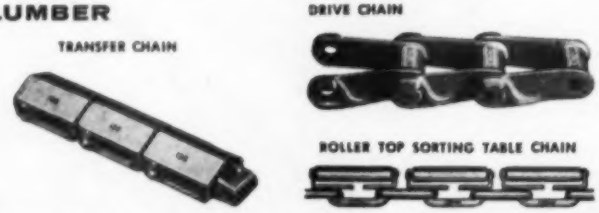
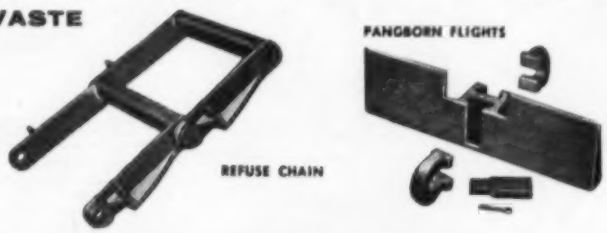
LUMBER



WASTE



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Specializing in the manufacture of chain

FOR SALES AND SERVICE, CALL . . .

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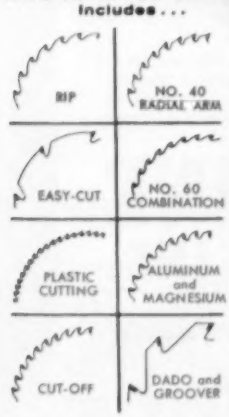
SIMONDS COMPLETE LINE OF CARBIDE-TIPPED SAWS Includes...



You can't beat this new saw for general hand-feed cutting. It will rip, cut-off and mitre hardwood, softwood and plywood, as well as hardboard, plastics, composition materials, etc.

And the cut edge is so smooth it doesn't have to be sanded!

That's because Simonds engineers have designed a new style of tooth with extra hook for faster, easier feeding and special fitting to run with 50% less friction so that it cuts freer, requires less power and eliminates burning when properly used.

This new No. 55 General Purpose Saw is now in stock in sizes from 8" to 18" inclusive. Here, indisputably, is the smoothest-cutting, longest-lived, most useful carbide-tipped saw on the market . . . at NEW LOW PRICES that make it today's best buy! Get the facts from your friendly Simonds Distributor.

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SAWYER CONTROLLED
FAST—ACCURATE—MECHANICAL

The TROUT SETWORKS has always set the ACCURACY standard for the sawmill industry. KLAMATH MACHINE & LOCOMOTIVE WORKS, INC. now has designed sawyer operated, automatic remote controls for the KLAMATH ANTI-FRICTION BEARING TROUT SETWORKS. This has been accomplished with no alteration whatever in the mechanical principles which give the TROUT SETWORKS its unfailing accuracy.

NOTE THESE FEATURES

1. *Complete sawyer operation.*
2. *Trout accuracy maintained to .015"*
3. *Setting speed maintained.*
4. *Automatic operation reduces wear on parts.*
5. *Maintenance is simple.*

Representatives in Washington, Montana and Northern Idaho: AIR MAC, Inc., 3838 Fourth Avenue South, Seattle 4, Washington, and AIR MAC, Inc., E. 3710 Trent Avenue, Spokane 10, Washington. In Arizona: Arizona Mining Supply Company, Prescott, Arizona.

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Look for the Indian Head on all **KLAMATH MACHINE** *products*

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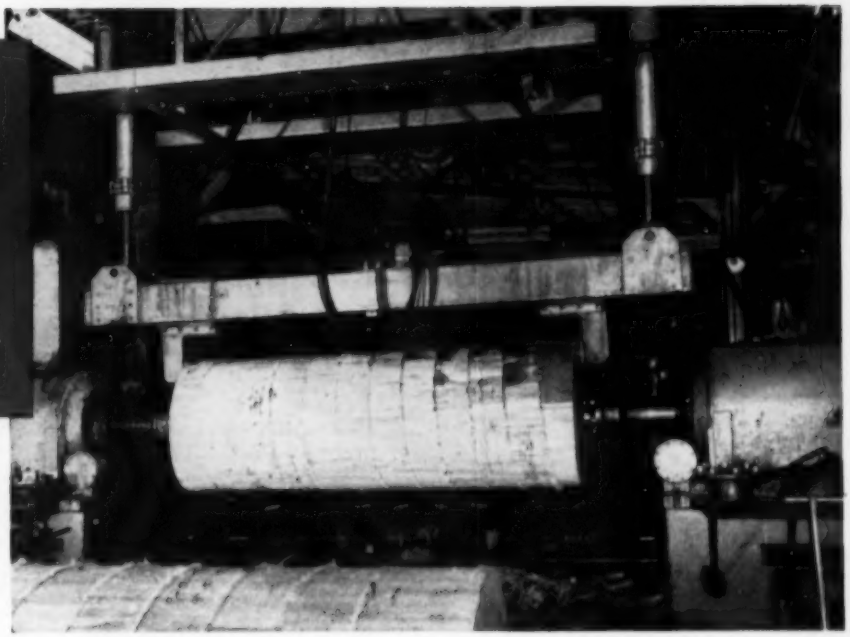
EDERER OVERHEAD LATHE CHARGER



Pre-centered peeler enters lathe in 10 seconds and stops automatically at exact loading position; peeler is chucked in another 10 seconds.

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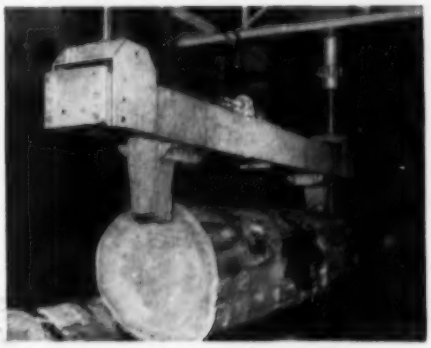
Help Cut Peeler Chucking Time to 10 Seconds

The time-consumer in chucking peeler blocks is in getting the block properly aligned to provide the most veneer. This lathe charger, developed by Ederer Engineering Co., uses Vickers Hydraulics to do all the aligning before the block moves into the lathe. Then, when the lathe drops the core of the previous block, the new block automatically moves into correct chucking position. Minutes are saved in the operation of the lathe.

This is only one of many ways in which Vickers Hydraulics serves the lumber industry. From forest to finishing mill, you will find Vickers equipment used because of its amazing versatility, simplicity of installation and low maintenance. Ask for further information.



Vickers Hydraulics, operated by push button controls, move either end of block in any direction, permitting quick and easy alignment by means of cross-beam lights. Vickers Hydraulics also operate loader jaws.

6345-R

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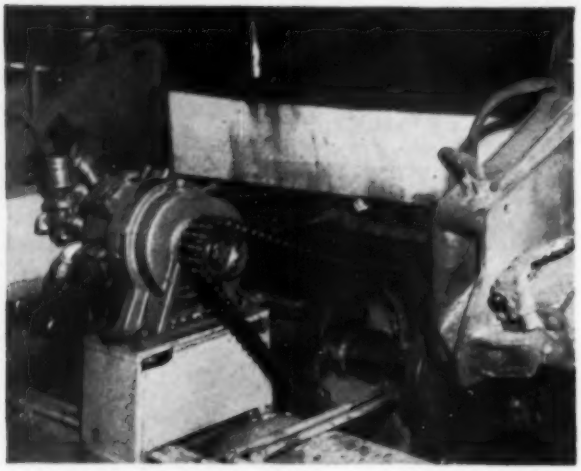
ENGINEERS AND BUILDERS OF OIL HYDRAULIC EQUIPMENT SINCE 1921

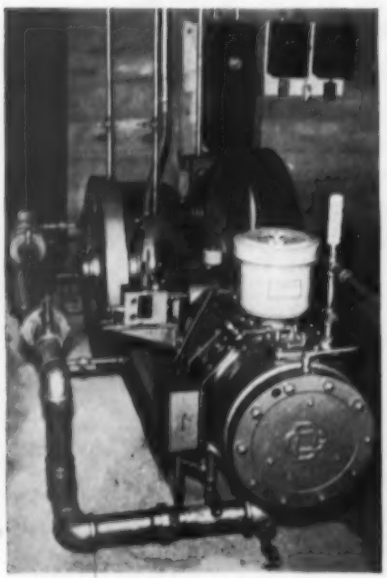
Modern air power for the modern mill

GARDNER-DENVER AIR POWER

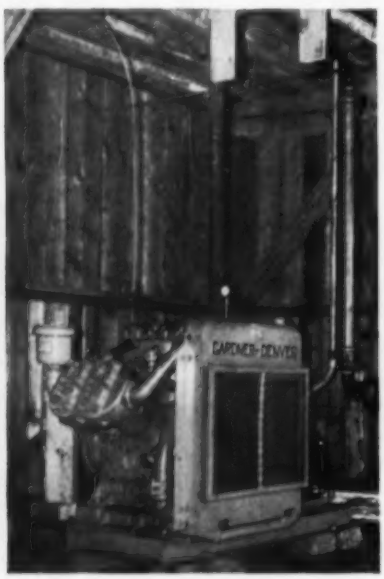
Gardner-Denver Air Motors—can't heat up, can't burn out. Geared and direct drive, reversible and non-reversible models available. Here one works on de-barker.



Gardner-Denver Air Motors—adaptable to a wide range of jobs. Here one provides air power for set works. Five cylinder radial design. Models from 3 to 15 h.p.



Gardner-Denver RX Compressors—for continuous service at low power cost. Sizes: 89 to 1292 cfm.



Gardner-Denver WB Compressors—compact, smooth running. Eight sizes from 142 to 1150 cfm.

Gardner-Denver Air Hoists—for dock and mill. Safe, easy spotting. Capacities from 150 lb. to 2 tons.

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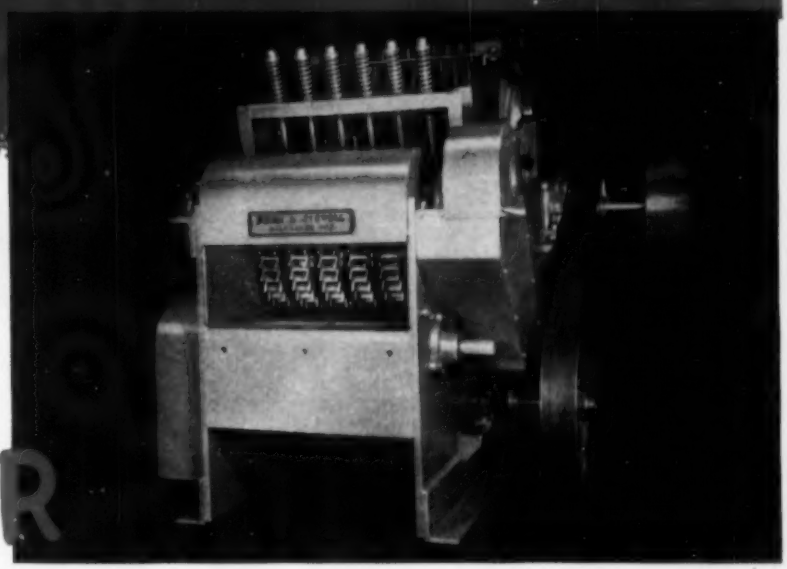
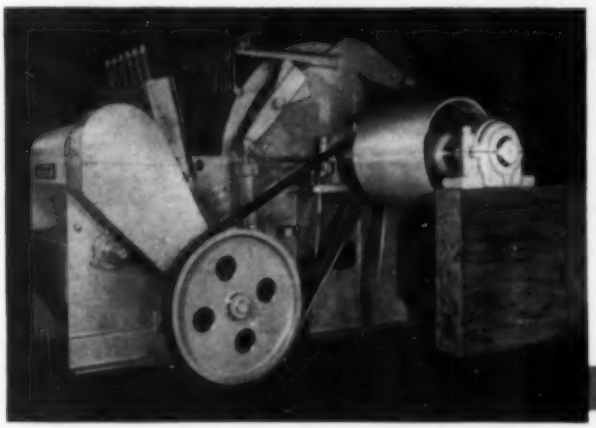
Announcing

FILER & STOWELL'S

NEW sawmill refuse CHIPPER



DESIGNED ESPECIALLY for SLABS, EDGINGS and TRIM BLOCKS



Converts sawmill waste to high-grade, uniform size pulp chips at the rate of 10 cords per hour! Contains features that sawmill operators have long wanted, such as: *Large opening designed for refuse; Simple installation; Controlled horizontal feed; Automatic clearing cylinder; Individually hung pressure fingers which follow contour of the knives holding the ends of the stock being chipped.* Discharge is either through bottom or at rear as desired. Available in different sizes.

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1856-1956

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SAFETY ENGINEERING

Warning Device on Lumber Carrier Axle

With an old brake drum as a sounding board (shown above), the clank of metal on metal warns lumber yard workers at the North Fork, Calif., mill site of Associated Lumber & Box Co. that a lumber carrier is starting up or is slowly approaching a work area. The drum is welded onto the axle. A pipe is fastened inside the drum and within the pipe a large ball bearing rolls free. Warning noise ceases, from centrifugal force, as carrier picks up speed and moves away.

Outstanding Safety Mark

The 300 million-board foot cutting mark was recently passed by the Klamath Falls, Ore., sawmill of Weyerhaeuser Timber Co. without a lost-time accident, according to Otis O. Saylor, sawmill superintendent.

1956 Safest Work Year For the Crossett Co.

• By achieving a 25 per cent reduction in disabling injuries, employees of The Cross Company, Crossett, Ark., made 1956 the safest work year in the history of the company. It was the third consecutive year in which employees scored such a substantial reduction in injuries.

According to The Crossett Company's Safety Director, R. E. Bell, the company set a new corporate safety record in 1956 by working 4,898,826 man hours with only 36 disabling injuries. During 1955, employees suffered 43 disabling injuries in 4,524,915 man hours at work. The record for 1954 stood at 56 injuries in 4,320,782 man hours.

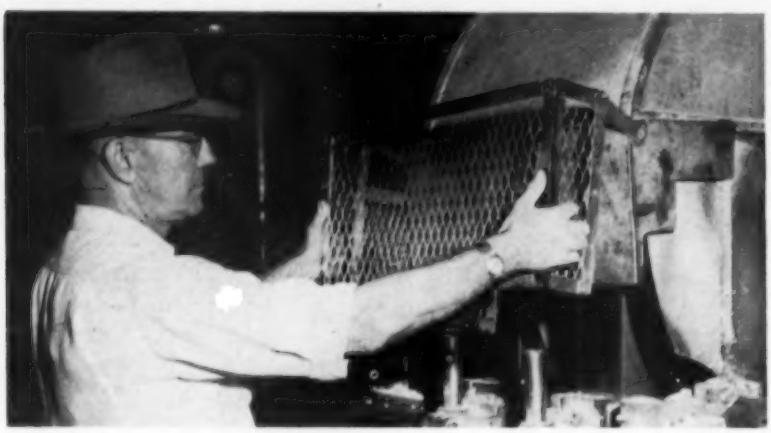
Departments with the best safety records at Crossett Paper Mills and Crossett Lumber Company were honored with dinners. Departments winning safety honors at Crossett Paper Mills were Power Plant & Recovery and Pulp Mill No. 2. Both departments had perfect safety records last year. At Crossett Lumber Company three departments, Maintenance & Power, Dry Chains & Kilns, and Greenyards were winners with perfect records, also.

Mr. Bell declared that the corporate safety record is due in large measure to the achievements at The Lumber Company. Employees there worked 1,848,505 hours with only 24 disabling injuries for a rate of 12.9 injuries per 1,000,000 man hours worked. Their rate in 1955 was 17.00.

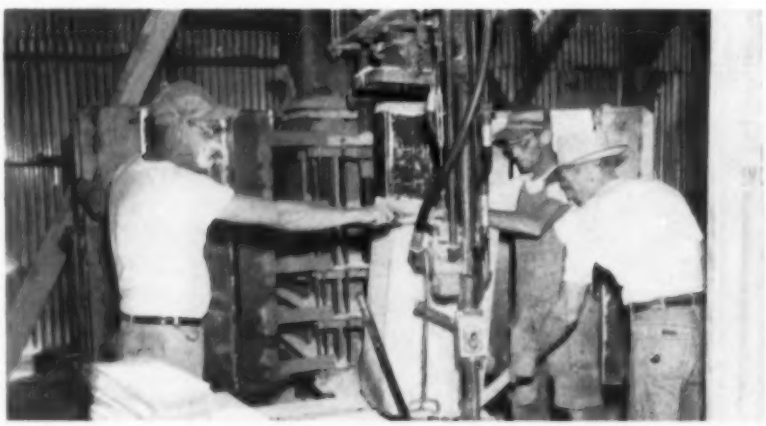
SAFETY SCREEN for Resaw Lifts and Stays

An effective safety screen for the resaw that lifts and does not have to be removed, was recently designed by C. A. Burkholder, maintenance superintendent of the box factory of General Box Distributors, Fresno, Calif.

Mr. Burkholder wanted a safety screen which would not have to be unfastened, removed, replaced and refastened. The screen also had to be one not subject to kicks or possible damage while removed from the resaw. As a result he designed the screen shown below. It balances off center and lifts up and back. It is made from steel mesh, 1"x1"x⅛" angle iron and is bolted to the main resaw guard.

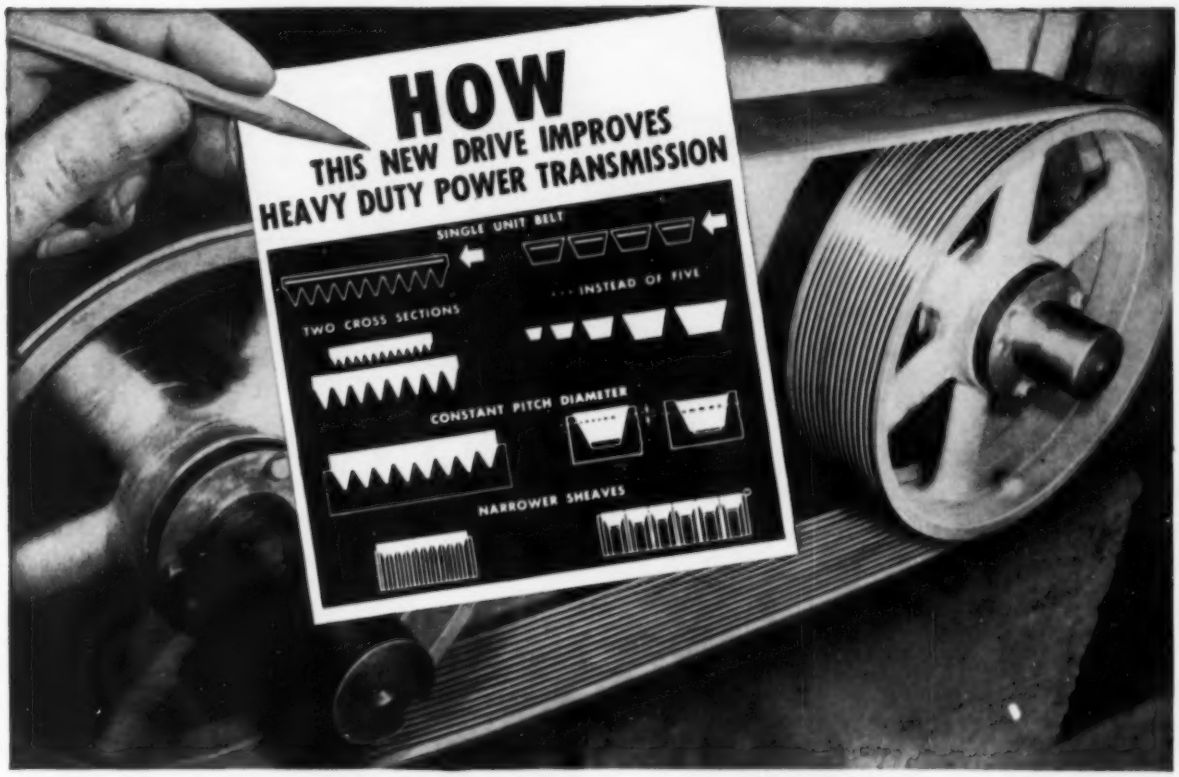


IN HIGH HAZARD DUST AREA in the Fresno, Calif., box factory of General Box Distributors, more than 40 pairs of goggles have been made available to employes who must work in these sections of the plant. Safety director, Andrew Quinn reports that in such areas, when goggles are not used, dust accounts for 70% of the non-lost-time accidents. Since widespread use of goggles, such eye accidents have been almost eliminated. Photo below in wood flour bailing department.



Logging Company Offers Cash for Safety Ideas

The Washington operations of Simpson Logging Co., offers $2.50 to $5 for safety ideas that are approved by the plant safety committee concerned. Each idea is judged on its own merit, not in competition. Howard Curtis, Simpson safety supervisor, urges men not to keep their ideas a secret. Suggestions must involve more than routine maintenance problems.



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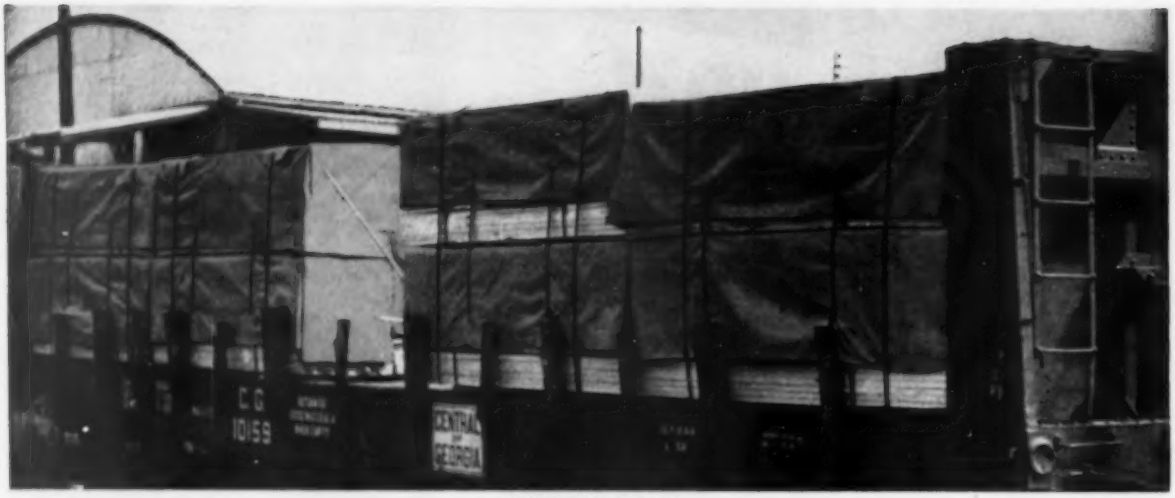

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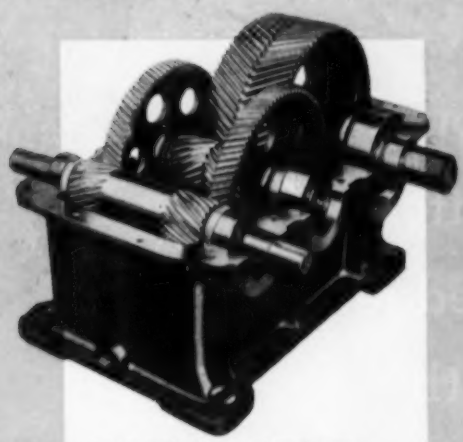

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OK cutter designed for generated head

OK patented easy-edging cutter with filler plate to match. This eased edged knife can be used in any standard corrugating side head, thus eliminating the expense of special heads.

These OK splitter knives are carried in stock ready for immediate delivery. Sizes for 1/4" and 5/16" kerf.

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THE FRONT COVER

STACKER ON THE END of the main dry finish chain at Dwyer Lumber Co., Portland, Ore., is a Stetson-Ross unit. This is part of the increased utilization and improved manufacturing facilities that this company is using to keep pace with the demands for diversification of product manufacture. The article in this issue "Getting More Dollars Per Board Foot", is an excellent example of how today's sawmill must continually reinvest in its manufacturing facilities to remain in a competitive position. See story beginning on page 34.

Industry Meetings

September

Wooden Pallet Conference, Syracuse, N.Y., Sept. 10-12.

Eastern Wooden Box Association, Chatham Bars Inn, Chatham, Mass., Sept. 11-13.

Association of State Foresters, Longview, Wash., Sept. 11-13.

Western Pine Association, semi-annual meeting, Multnomah Hotel, Portland, Ore., Sept. 11-13.

East Central Wooden Box Association, Bedford Springs Hotel, Bedford, Pa., Sept. 12-13.

Hoo-Hoo, 66th annual national convention, Dinkler-Plaza Hotel, Atlanta, Ga., Sept. 15-18.

Northern Sash and Door Jobbers Association, Minneapolis, Minn., Sept. 30 - Oct. 2.

American Forestry Association, 82nd annual meeting, Sept. 30 - Oct. 2, Loraine Hotel, Madison, Wis.

October

Northwest Hardwood Association, Fall Quarterly meeting, Oct. 12. Site to be selected.

National Safety Congress and Exposition, 45th annual, Chicago, Ill., Oct. 21-25.

Pacific Logging Congress & Machinery Show, Seattle, Oct. 30 - Nov. 1.

December

Southern Sash & Door Jobbers, winter meeting, Roosevelt Hotel, New Orleans, La., Dec. 2-4.

Western Forestry & Conservation Association, Olympic Hotel, Seattle, Wash., Dec. 10-13.

1958

February

Governors Industrial Safety Conference, 8th annual, Fairmont Hotel, San Francisco, Calif., Feb. 6-7.

National Wooden Box Association, San Francisco, Calif., Feb. 19-20.

March

Southern Forestry Conference, Forest Farmers Association, Monroe, La., March 27-28.

April

Northeastern Loggers Congress, 4th annual Mark Twain Hotel, Elmira, N. Y., April 21.

May

Redwood Region Logging Conference, Ukiah, Calif., May 23-24.

You Should Know . . .

GORDON MANARY, vice-president and general manager of Simpson Redwood Co., Arcata, Calif., grew up in the industry. Son of a logging man, James Manary, one of the early Columbia River loggers, he went to work in the woods in the summer months when he was 12. Following discharge from the service in World War I, he went back to the Columbia River area, working in the woods for Clark & Wilson Lumber Co., and later in the Coos Bay, Ore., area. In 1923 he took charge of his father's firm, Manary Logging Co., which was supplying logs for the Pacific Spruce Corp. at Toledo, Ore. In 1929 he joined the Pacific Lumber Co. at Scotia, Calif., as logging superintendent when the redwood cut was running as high as 115 million feet annually. He moved up to logging manager and became vice-president and general manager in 1952. He moved from this post to Simpson in 1957. He is currently chairman of the California State Redwood District forest practice committee, is active in the Redwood Region Logging Conference and served as president of the Pacific Logging Congress in 1939.

RICHARD M. CONNOR, SR., president and resident manager of Connor Lumber & Land Co., Laona, Wis. Though not a native of Laona, Connor has spent most of his important years in the area. It was here when 10 years old and vacationing with his father that Connor started spending summers doing odd jobs at the mill. And it was here he returned to get married, leaving the University of Wisconsin to work full time for the company. Up until 1941 he was manager of the land and logging division, since 1941 he has been resident manager, and since 1944 president. A son, Dick, a student in business administration at the University of Wisconsin is working summers at the plant and will probably follow his father's career. The senior Mr. Connor has always been keenly interested in expanding the possible uses of residual wood. Pursuit of this interest has recently led him into the investigation of various marriages of wood, plastics, use of wood flour, etc. He is justly proud of a molded plastic and wood product called "Mapleite" which he may soon be able to put on the market.

FREEMAN SCHULTZ, vice-president and general manager of Brooks-Scanlon, Inc., Bend, Ore. Schultz was born in Rice Lake, Wis., in 1900, came to western Washington as a youngster. He attended high school in Merced, Calif., and obtained a bachelor of arts degree, majoring in law at the University of California. He started driving a horse for the Algoma Lumber Co., Klamath Falls, Ore., in 1925 where he worked his way up to the managership in 1940. He was plant superintendent and assistant general manager of Coss Bay Lumber Co., Coos Bay, Ore., and manager and vice-president of Juneau Spruce Co., Juneau, Alaska. From the latter post he went to Flagstaff, Ariz. as vice-president and general manager of Saginaw and Manistee Lumber Co. until its sale to Southwest Lumber Mills where he became Flagstaff division manager. He went to Brooks-Scanlon in 1954 as assistant manager, was soon up to the top post. He is a member of the Oregon State Board of Forestry, chairman of District 4 of the Western Pine Association.

DWYER Lumber Co. operations at Portland. Cold deck in foreground. Airport out of photo at left.

Getting More Dollars Per Board Foot

is considered an economic necessity by the Dwyers who are systematically diversifying their operations.

Following a plan of multi-product development, the latest edition to the Portland, Oregon, plant of Dwyer Lumber Co., is a complete and well organized barker-trimsaw deck where all logs are barked, and the addition of a veneer plant now being converted to a complete plywood mill.

Diversifying to permit flexibility has long been recognized as a sound business practice by principals of the Dwyer Lumber Co., who have moved progressively to improve utilization and gain increased multiple product manufacture. The combination of tighter competitive conditions, need for quality products, higher stumpage prices makes increasingly necessary the getting of more dollar returns from every board foot of wood harvested, according to Anthony J. Dwyer, president of the firm.

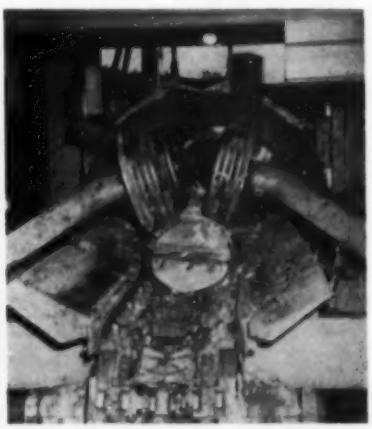
The original 8-foot band mill erected by the late Anthony C. Dwyer in 1924, cut 24 million feet yearly. To this has been added a 30-inch Mill Engineering gang mill in 1948, (April 1948 issue THE TIMBERMAN), dry kilns completed in 1949, a planing mill, barker and chipper system and the veneer plant. Excess power developed in the steam turbine power plant is sold to a power pool in the area. Gone is the burner and the once thriving hog fuel business is now largely an oil distributing firm. Present demands require nearly 50 million feet of logs yearly but with a vastly increased recovery over that of 33 years ago.

FIRST EXPANSION was in 1948 when the gang mill was installed. The mill's cutting program was for one and two-inch stock from smaller material brought in from the woods. With the woods utilization standard occasionally exceeding forest service requirements, they bring in nearly everything from the woods that will make a saleable 2x4.

BARKER: an important part of the over-all utilization program at Dwyer is the barker-trimsaw deck, over which about 200,000 feet of logs are processed daily. This unit, recently completed, is where the logs are barked for more effective sawing and peeling and separated for their end-use.

A jackladder lift from the pond carriage carries the logs from the pond

BARKER deck with jackladder lift in center; barker building in center; deck saw building at left and return skids to pond. Building at right is for fuel hog system.



BARKING of all logs is handled by this Nicholson 60-inch barker.

FACTS ABOUT DWYER

Dwyer Lumber Co., one of the few remaining major mills within the direct vicinity of Portland, Ore., was started in 1924 by the late Anthony C. Dwyer, to cut timber on privately owned lands. The company now operates on public timber sales with an annual cut of 48 million feet per year.

The operation is managed by Mr. Dwyer's three sons and one daughter. They are: Anthony J., president; Edwin C., vice-president and general manager; Robert F., vice-president and logging manager and Rosemary Dwyer Frey, secretary-treasurer.

PROGRESSIVE IN THE WOODS

An early user of both airplane and radio on their logging operations, all of the Dwyers are pilots. They were among the first to adopt radio for woods use and for communications between the woods and the mill some 50 miles distance. Long advocates of salvage logging, they clean-log their woods and take in everything that is merchantable.

Dwyers have developed several types of special equipment for handling and hauling of small logs and chunks and have done considerable development work in salvage logging.

ROLLWAY sends logs back into pond sorting pockets from the barking deck and bucked. Two sorts made for gangmill. Sorts made for band mill and veneer plant.

to a chain transfer system. An air kicker which flips the logs onto a flight chain, feeds a Nicholson 60-inch ring barker. The barker is powered by a 75-hp GE motor and operated at an average speed of 20 feet per minute. All species of logs, except cedar are barked. The stringy bark of cedar causes difficulty in handling through the barker. About 60% of the mill's operation is Douglas fir, 35% hemlock, 4% Noble fir and the balance is cedar and other species.

Logs offbear from the barker onto a flight chain from where they are kicked onto the trimsaw feed chain. It is at this point that the end use of the log, or any part of the log, is determined. The trimsaw operator checks each log for grade to determine its proper use. He has three possibilities: the band mill, the gang, or the veneer plant. Often he will split a log among these three possibilities. Cutting is largely to order and the mill superintendent keeps the trimsaw operator aware of the daily requirements.

The operator controls the movement of the flight chain through the swing-operated 7-foot Simonds circular saw. This unit is powered by a 50-hp Louis Allis motor with air dogs holding the log while it is sawed.

After bucking, the logs or blocks offbear onto another flight chain with two sets of kickers controlled by the trimsaw operator. One set kicks the logs to the left into the band mill pond area. The other kicks peeler blocks and gang mill logs to the right where they are sorted for use. To facilitate sawing, two sorts are made for gang logs; 16 inches and under and those between 16 and 30 inches in diameter. Peeler blocks are sorted into lanes by grade, as the plant peels to order. This simplifies peeling of the desired grades of veneer.

VENEER PLANT: The veneer plant, newest development of the Dwyer utilization program, peels about 3 million square feet a month on a ⅜-inch basis, and with a force of 20 men. Logs are brought up a deck ladder to a 60-foot deck. Cores drop out from the lathe onto a conveyor that carries them back to the pond. They then drop into a pond pocket and are rafted down the pocket to the gang mill to be sawed for studs.

An Ederer overhead loader is used to charge the 84x110-inch Coe lathe driven by a GE Amphlidyne unit. The lathe feeds a Coe 175-foot 6-tray system, and two Coe semi-automatic clippers, serving 45 feet of sorting chain. Four men sort for each clipper.

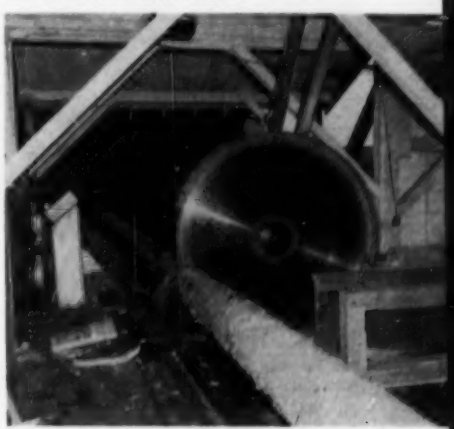
LOGS are kicked from deck, right for gang and veneer plant, left to bandmill.

A Clark lift truck is used for handling veneer. A Signode AP 5820 air-powered strapping machine is in use for bundling with ⅝-inch Signode strapping. Overhead strap dispensers holding 100-pound reels (approximately 1700 feet) furnishes the strap. A frame of channel iron was made to hold the stacks for bundling. Channels under the load provide passage way for the straps for ease in placement as well as accurate strap positioning.

The refuse chain from under the lathe ends at a 72-inch Sumner veneer chipper with side feed. This chipper discharges to an overhead cyclone from where the chips drop onto a shaker-classifier screen. Correct size chips screen through and drop onto

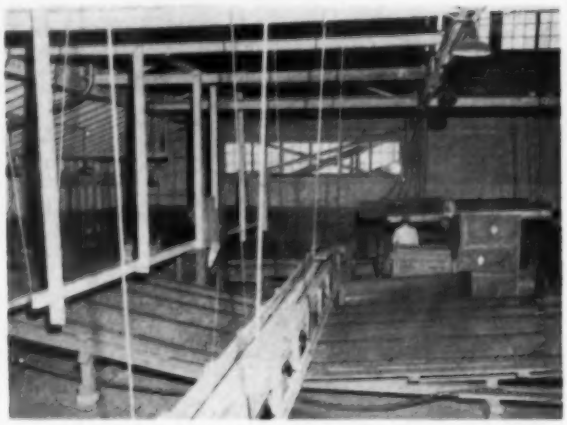
FOR DWYER PLANING MILL AND VENEER PLANT SEE next two pages . . .

CLASSIFIED barked logs are bucked with this 7' Simonds circular saw.



Planing Mill Processes 150,000 Board Feed Daily at Dwyer Lumber Co.

PLANING of lumber starts with Stetson-Ross unstacker and 612-C planer. Speeds up to 750 feet per minute are used.



CENTER conveyor belt from planer carries lumber to grading table. Re-trim lumber goes to Stetson-Ross swing saws, left.

a conveyer belt taking them to the nearby 40-unit bunker. The overs drop onto a separate conveyer crossing over the tipple and dropping down a chute onto the mill refuse conveyer, carrying them through for re-chipping.

The veneer plant building is of wooden construction with Ritter Roof Structures trusses. Reinforced 6-inch concrete was used for flooring. The building is 375 feet long with widths varying from 24 feet in the tray section to 80 feet in the sorting chain and storage area. A total of 20,000 square feet of floor space is involved.

Hjalmar Nelson is engineer in with the green end the first phase with the green end of the first phase in its construction. Ground has already been filled, graded and graveled for the Coe 18-section, 5-line dryer which is on order. The entire finish plant, a hot press plant, is slated for completion in late 1958. It will have 60,000 square feet of floor space with 86-foot trusses used in building.

DRY KILNS: Modern dry kilns were installed, starting in 1945, with the fifth Moore unit completed in 1949. These 110-foot long units have a combined drying capacity of about 100,000 board feet daily. Cooling sheds are located along side, with an Irvington double end trimmer, sizing stock to length after unstacking is completed.

PLANING MILL: About 150,000 board feet daily are processed through the Dwyer planing mill that is housed in a 180x200-foot building. Twenty three men handle this operation. For the main Stetson-Ross 612-C-1 planer, stock is set on a transfer chain by lift truck. The chain feeds to a Stetson-Ross unstacker from where the boards are transferred to the automatic planer feeder. The unit's high planing speed, up to 750 feet per minute, requires two graders to keep pace. Stock to be trimmed for grade is pulled onto a power roll to a merry-go-round serving the Stetson-Ross hula saws. Trimmed stock is belt-conveyed back to the sorting chain.

A 150-foot sorting chain follows the graders. Sixteen racks are installed above the chain for sorting and bundling. These racks accommodate stock as short as 24 inches. A Stetson-Ross stacker at the chain's end is used to build carrier loads when individual sorts are not required. Five men pull on the sorting chain with power rolls in use on the offbear side to assist in pulling stock of specified length.

An American matcher offbears onto a sorting chain with a grader, two sorters and bundlers working with sorting racks, and one man taking the bundles from the chain end and piling them. A short merry-go-round services an Irvington hula saw trimming for grade on this unit.

A Woods 135BM moulder is operated with one feederman, a grader, a sorter and a fourth man operating the Irvington hula saw re-trimming for grade. A merry-go-round serves this unit.

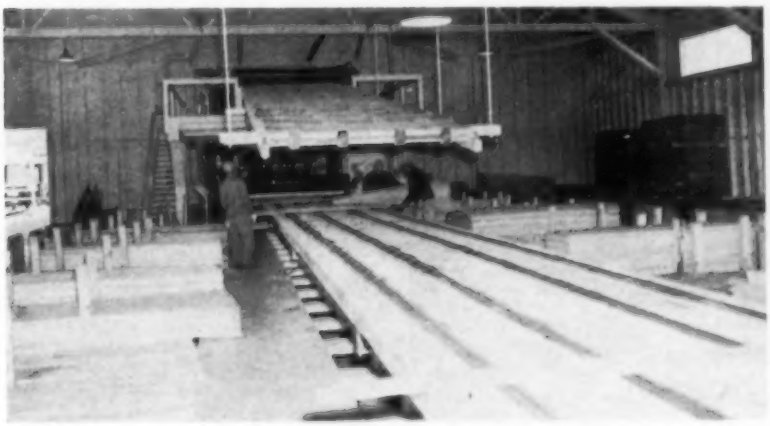
MOULDINGS are formed with Woods 134BM moulder in planing mill. Irvington hula saws are used for retrim of this stock.

SORTING chain in planing mill is 160 feet long with five men pulling. Power rolls used on pulloff side of chain.

Veneer Plant Is Most Recent Addition at Dwyer

LATHE in the new veneer plant is an 84 x 110-inch Coe, using an Ederer charger, seen in background. Lathe operator, above, a tipple operator on lathe offbear side.

FEEDING the 175-foot, 6-line Coe tray system from the lathe tipple.



CLIPPING is handled with two Coe semi-automatic clippers. Green veneer sorting chain is 45 feet long for each clipper. Sorts are made into 34 carts from chain.

An American Sheet Metal Works No. 90 heavy duty planing mill exhauster blower expells the planer shavings. The blower is direct-coupled to a GE 200-hp, 900-rpm ball bearing motor. This unit is mounted in the rafters of the building and blows the shavings 250 feet through a 36-inch pipe to a dust collector above the fuel house. Sawdust from the dry lumber trimsaws is also blown through this system.

CHIP PRODUCTION: Dwyer's bandmill and gang mill are producing an average of 65 units of chips daily. Early runs on the veneer plant show that this source will furnish about 25 additional units daily.

The bandmill has a 66-inch Carthage wastewood chipper which takes wood from the edger. A 36-inch Carthage chipper takes culls pulled on the green chain. Chips are conveyed to the main conveyer taking chips from the larger chipper, and thence to the 200-unit bunker.

Dwyer's chip program was stepped up with the barker installation, but they had been picking clean wood from the hog-conveyers for chipping for three years.

Chips are screened for correct size with a Rotex shaker-screen. Outsize chips go back to the chipper.

A 48-inch Carthage chipper takes all waste from the gang mill. From this chipper, chips are belt-conveyed to the bunkers located between the gang mill and the veneer plant. Chips are loaded into trucks from the bunkers by gravity through the trapdoors. International L-190 trucks with Pointer-Willamette trailers are used for hauling. Hemlock chips go to Publisher's Paper Co., Oregon City, Oregon, and Douglas fir chips go to Longview Fibre Co., Longview, Wash.

Dwyers have compiled accurate chip recovery figures showing that 4/10 of a unit of chips are obtained from each 1000 board feet of logs cut. This figure is based on gross log scale.

HOGGED FUEL: Formerly the Dwyer organization had a fairly large wood fuel retail business, but the barker-chipper program has nearly eliminated this activity. About 20 units of sawdust are being sold daily for home heating, but most of Dwyer's fuel business, formerly a sideline just to market mill waste, now is in commercial distribution of furnace oil. This points up the changes in waste utilization.

Shavings and a small amount of hog fuel unsuited for chips are used as fuel for the boilers. A Diamond hog is installed in the bandmill.

Bark from the barker is also used for fuel. This is chain-conveyed to a Diamond fuel hog and introduced into a Rader Pneumatics loader. A Sutorbilt compressor powered by a 75-hp GE motor, furnishes air for transfer of hogged fuel to the storage house

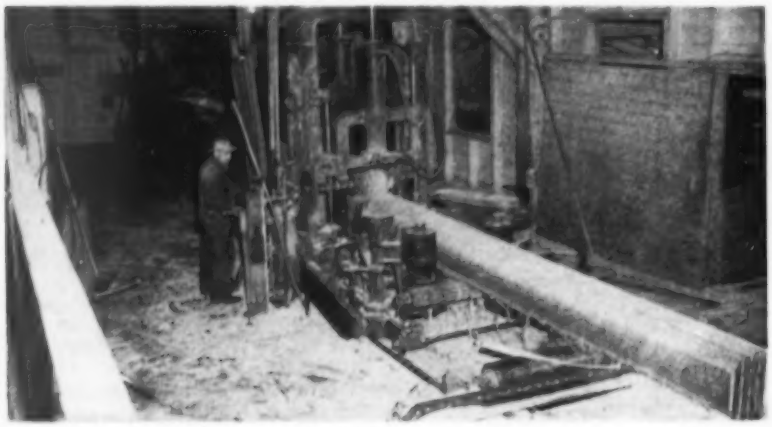
FOR MORE ON DWYER OPERATIONS SEE next page . .

RESPONSIBLE for operations, are, left to right: Hjalmar Nelson, plywood plant engineer; Edwin Dwyer, general manager, and Joe Petrovick, veneer superintendent.

Gang Mill and Dry Kilns Were First Improvements

BARK hog fuel system has Diamond hog, center back, powered by GE motor, Rader controls for blowing system and Sutorbilt compressor. 7½ pounds pressure used.

CHIPPER in veneer plant is 72-inch Sumner unit. Chips important by-product.



GANG mill, 30-inch Mill Engineering unit, was completed in 1948 and immediately stepped up production by 50,000 feet daily. Handles logs up to 24-feet in length.

through a 600-foot 8-inch blowpipe. Although this system has a 20-units-per-hour capacity, Dwyer personnel have been surprised that even this capacity seems slim at times when heavy old-growth bark fills the system. A small amount of the hogged bark is being screened and sold for mulch.

POWER PLANT: The complete power plant has a boiler capacity of 1100-hp and a 3950-kw electric production. About 500 kilowatt hours are being sold daily to the Portland General Electric Co., into whose lines the company is tied. This income just about balances the bill for the illumination of the plant when the generators are shut down at night. The entire plant runs but one shift. Only sufficient steam is maintained at night to operate the dry kilns.

Babcock & Wilson, Sterling-type water tube boilers are used in the power plant, along with Allis-Chalmers generators.

The plant's fuel is stored in a 200-unit fuel house and conveyed to the boilers as needed.

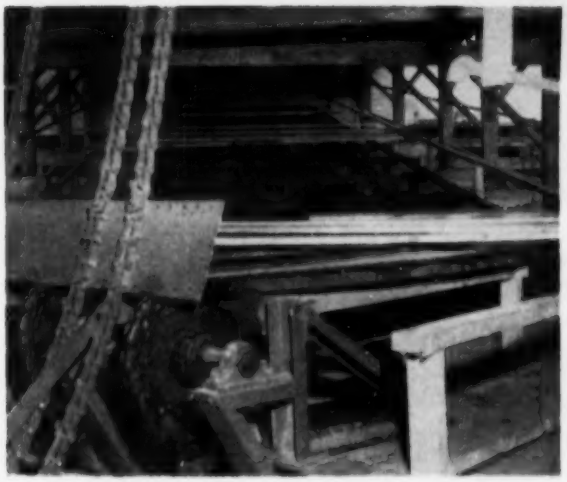
THE PLANT SITE is located on an 83-acre site bordering on Portland's southeast city limits at the foot of Mount Scott. About 25 acres of this is in use for the actual plant, with additional space used for winter cold decks. A 15 million foot deck was stored for the 1956-57 winter's operation, as Dwyer's high-country logging is shut down at least three months of the year because of snow. Also located on the site is a 1600-foot paved landing strip and hangar for the Cessna 180 aircraft used principally by logging manager Robert Dwyer for his daily trips between the plant and the woods. A total of 225 employes operate the plant with 100 men in the woods, including contractors.

MARKETING AREA: The plant cuts largely to order and their well-established name in the Portland area has resulted in an excellent local market. Two-thirds of the company's production is sold within a 200-mile radius of metropolitan Portland.

A number of specialties for the local retail trade are produced. Noble fir ladder stock is one item utilizing this sub-alpine tree. Noble fir has a fair acceptance locally, but Dwyer markets the hemlock-noble fir combination quite successfully on the east coast.

DRYING of lumber handled by the five Moore 110-foot kilns completed in 1949. Kilns dry an average of 100,000 feet daily. Cooling sheds are at right of kiln.

TURN of 90 degrees on green chain at end of the grading table on 2nd floor level, is start of space saving design.



DECLINE in green chain to ground level and 57 degree turn to covered chain area, completes turns in chain.

Fitting a Green Chain into Limited Space

Two turns and a decline were built into the green chain at the Connor Lumber & Land Co., mill at Laona, Wis. The first turn, 90 degrees, is at the end of the grading table where the lumber leaves the sawmill floor. The second turn, 57 degrees, is at the bottom of the decline and at the end of the company-built building connecting the sawmill with the new sort building.

These turns presented particularly knotty problems, because the outside chains have to travel faster than the inside chains. This was accomplished by gear reductions and changes of ratio, and, after innumerable adjustments, the six conveyor chains now line up the lumber precisely for the sorting area.

The Connor Lumber & Land Co. at Laona, Wis. used to take the sawn lumber out of the mill by a tramway system that ran at the second story elevation. When the company abandoned this system recently, it became necessary to devise a new means of transporting the lumber to the green chain. This posed several problems. In the first place, the new green chain could not be located in the same direction as the old one because of the extended length and interference with other buildings. Also, it was decided to put the new sorting department on the ground level.

So, the company's chief engineer, Norman D. McRae, was faced with the problem of bringing the lumber back around to the side of the sawmill building, the only space available for the new Butler all-steel building housing the green chain, and which measures 64x205 feet.

Construction superintendent, R. D. Gunderman, and shop foreman, Joe Aschenbrenner spent many hours poring over blueprints and plans with McRae and Richard M. Connor, president and resident manager before the smooth-working installation seen today became a reality.

The building housing the new green chain incorporates several of the newest features. Fibre-glass windows in the steel roof serve as shatter-proof sky-lights. The roof extends out over the sorting pockets. This is as important in the summer as it is in winter when hardwoods are stacked. If not protected from the hot summer sun, the lumber would check badly, even in the short interval before it is stored in a more permanent place.

Sorts are made on carts with flanged wheels which run on slightly inclined rails. The removal of blocks permits the loads to be easily pushed out to where a Gerlinger lift truck unloads them. More than 60 sorts are made because of the variety of species and the number of products made from the hardwoods, which includes flooring, trim, moulding, etc. All the flooring and planking in the new area was treated in the company's own treating plant.

Production at the Connor Lumber & Land Co. runs between 50,000 and 60,000 board feet per day, lumber scale.

GREEN CHAIN and sorting bins in all-steel Butler building with fibreglass windows. Sixty sorts are made for flooring, trim, moulding and other products.

TYPICAL COURSES of handsplit and resawn cedar shakes. Note thickness for insulation, roughness for run-off and circulation.

Increased use of rambling, ranch-type architecture has stimulated popularity of handsplit shake on houses of quality construction.

Cedar Shakes Stage Big Come-Back

Rough textured roofs desired by builders of new homes stimulate demand for handsplit western red cedar shakes made in the Pacific Northwest.

The Cedar Shake Has a Historic Background

From log cabin to mansion is a familiar story among famous personalities. Now the story can be told even more factually of a wood product—the lowly cedar shake. Utilized originally in the most primitive conditions, the hand-split cedar shake was used primarily because it was the handiest, and it did an excellent job of covering pioneer roofs and walls.

Now this same rough cedar shake is gracing some of the most expensive homes and has been termed the "Aristocrat of Roofing". The transition has taken at least 100 years, and it has been only in recent years that the cedar shake has gained deserved recognition.

ALONG THE WESTERNMOST SLOPE of North America, in Oregon, Washington, and British Columbia, grows the Western red cedar, from which cedar shingles and shakes are produced. Famed since pioneer days for its tight, straight grain and flawless, knot-free expanses of clear wood, the Western red cedar is noted above all for its unique resistance to weather and decay.

More than 150 years ago, the first settlers in the Pacific Northwest traded goods with the Indians for the cedar "bolts" which the Indians rafted to the settlements. The mallet and froe, an L-shaped axe, were used then just as they are today to split shakes from the bolts. Both roofs and sidewalls of pioneer dwellings were covered with shakes, which, being light in weight, did not require heavy supporting construction. The high insulating qualities of cedar and its durability were early recognized.

Because of the long growing span of Western red cedar, the wood is exceptionally fine and even textured. Millions of tiny air spaces occupy each cubic inch of the wood, giving it light weight and its high insulating value. Cedar trees usually grow 200 to 300 years before being logged and many reach 700 years of age before they are cut. Attesting to the durability of red cedar wood are the many pioneer homes of cedar shakes found today in good shape after standing more than 100 years.

New Methods

Except for modern logging methods, the cedar shake is manufactured in the Pacific Northwest in much the same manner as it was 150 years ago. One recent innovation, the handsplit-resawn shake, has carried shake production a step further to facilitate easier application.

There are three types of shakes manufactured today:

- Handsplit-resawn.
- Tapersplit.
- Straight split.

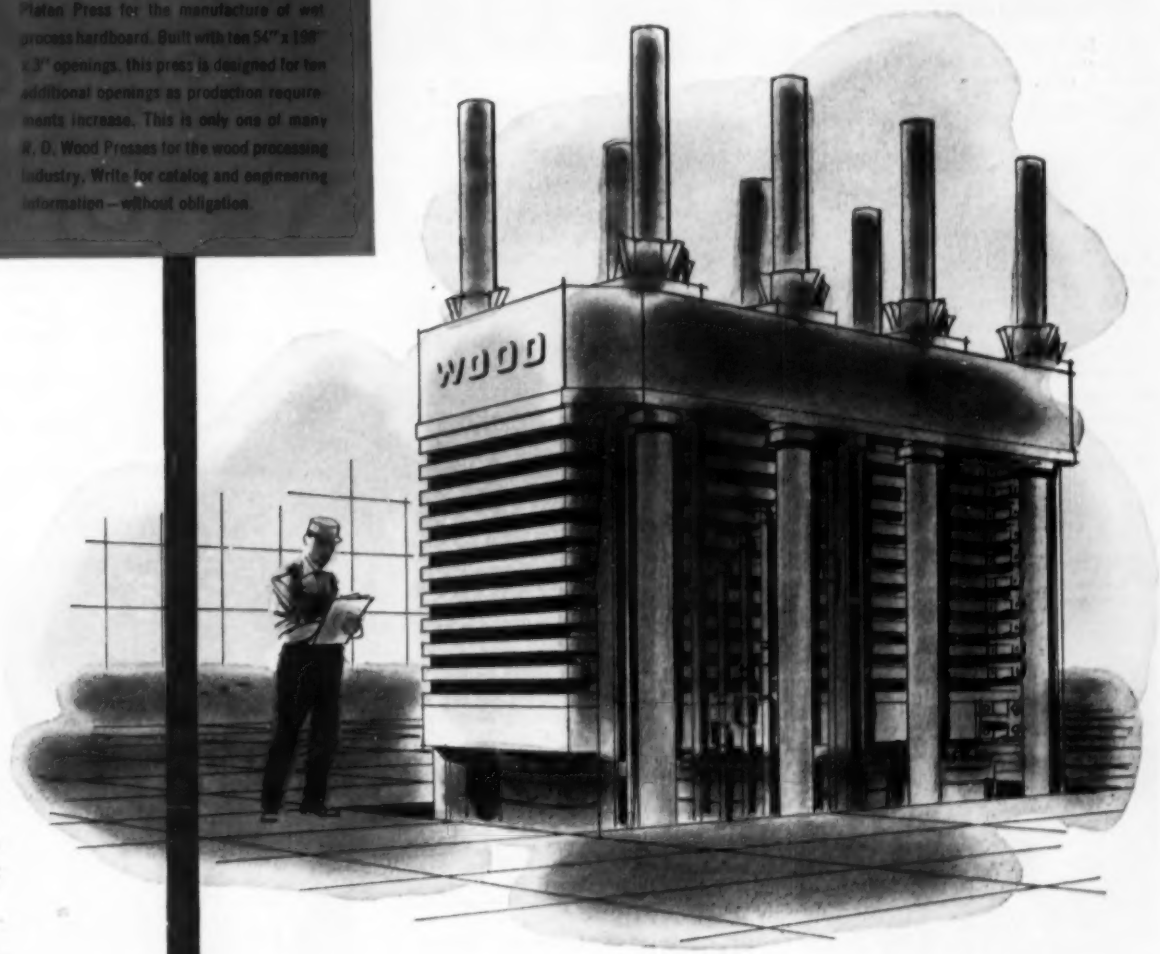
Regardless of how they are finally manufactured, all shakes originate from short blocks or "bolts" cut from the logs. These lengths may vary from 18 to 32 inches, but the most common length is 24 inches.

NEXT STEP IS SPLITTING out of boards or "blanks" approximately two inches thick. In some of the larger factories this splitting is done with variations of mechanical splitters. For

1,675-ton Self-contained Multiple Opening Platen Press for the manufacture of wet process hardboard. Built with ten 54" x 198" x 3" openings, this press is designed for ten additional openings as production requirements increase. This is only one of many R. D. Wood Presses for the wood processing industry. Write for catalog and engineering information—without obligation.

Twice the price won't buy a finer press

Watch an R. D. Wood Press at work and you'll see why. Here is dependable performance—smooth, precise operation; high production; minimum downtime for maintenance. And here, too, is long, trouble-free service. Reason: every R. D. Wood Press is the product of sound design, select materials, skilled craftsmanship. We build our presses to be best—and nothing less. You can't buy a finer press—even at twice the price!



R. D. WOOD COMPANY

PUBLIC LEDGER BUILDING • PHILADELPHIA 5, PENNSYLVANIA

O. E. HAYNES, left, owner of O. E. Haynes and Sons, Inc., Eatonville, Wash., and E. T. Haynes, son and manager, stand in front of portion of stock of straight-split or "barn" shakes", one of three types produced here.

TYPICAL WOODS operation at M. R. Smith Shingle Co., Mineral, Wash. Two men, left, split 24" blocks with froe and hardwood mallet. Man on right splits off bark, sapwood, and coarse heartwood, plus defects. Logs which are being used here were salvaged from a burned area.

the most part, however, splitting is done by hand with a mallet and froe just as in the old days. Material observed in use on mallets includes rawhide, hardwoods such as maple and yew, and even paper and old belting.

All shakes come in random widths ranging from four inches, a strict minimum, to a maximum of 12 inches. At the same time the two-inch blanks are split out, bark, sapwood, and coarse heart are also removed, as well as any defect that can be eliminated that way. Butts need not be at right angles to the edges, nor do edges need be exactly parallel.

Straight-split shakes, or "*barn shakes*" as they are known to the trade, are produced by splitting a block or bolt with a froe and always from the same end. This produces a shake fairly uniform in thickness from butt to tip.

Taper-split shakes are also produced entirely by hand in the same manner at the straight-split shakes. The difference lies in the fact that the block is reversed, end for end, with each

The Old Way

The New Way

Production for 1956

The Red Cedar Shingle Bureau compiled the following figures which show total output of "Certi-Split" shakes, in various types, during the calendar year 1956. These figures are based on reports furnished monthly by member mills, and as such, do not represent the total production figure for the area.

Shake Size and Type	No. Squares	Percentage
18"x⅜" to ½" Resawn	4,541	1.4
18"x¾" to 1¼" Resawn	8,807	2.8
24"x⅜" to ½" Resawn	2,464	.8
24"x½" to ¾" Resawn	46,633	14.7
24"x¾" to 1¼" Resawn	205,470	64.8
32"x¾" to 1¼" Resawn	727	.2
24"x½" to ⅝" Tapersplit	40,051	12.6
18"x⅜" Straight-Split	6,762	2.1
24"x⅜" Straight-Split	1,806	.6
Total	317,261	100.0

The above figures are for Oregon, Washington, and British Columbia. Canadian mills produced 68,000 squares of the total reported.

"The red cedar handsplit shake will be seen on quality homes in ever increasing numbers in 1957 as the demand for quality home construction grows," says Robert F. Myers, Jr., of the Red Cedar Shingle Bureau. "Already the handsplit has invaded new markets where heretofore it has been virtually unknown." Myers further pointed out that with the advent of a refinement in the manufacture of handsplit shakes, production has been increased with the result that wider market areas may be served.

LEFT PHOTO shows two specially built shake splitters at John Bloom & Son Shake Co., Elbe, Wash. Gail Bloom, co-owner, splits 2" boards, uses steel froe and hardwood mallet. Simple frame holds stack of boards being split. The boards are then resawn diagonally full length.

PHOTO AT RIGHT shows two specially built shake splitters at Seattle Cedar Lumber Mfg. Co., Seattle, Wash. Hydraulic splitter is operated by foot pedal enabling splitterman to use both hands on blank. Table raises, forces board against stationary froe, with 1000 psi.

STANDARD ENGINEER'S FIELD REPORT

PRODUCT	RPM MULTI-SERVICE GEAR LUBRICANT
FIRM	MOORE MILL LUMBER CO. Bandon, Oregon

RPM Lubricant reduces gear wear 30 to 40%

Overheated differential gears on Moore Mill Lumber Co.'s 21 logging trucks were a real problem until firm changed to RPM Multi-Service Gear Lubricant three years ago. "After a rough day's hauling, many of our trucks would pull in with the lubricant actually boiling and bubbling in the case," reports Maintenance Superintendent John Goodwin (above), shown tightening differential inspection plug.

"Overheating like this shortens gear life...causes pitting and scoring. With RPM Multi-Service Gear Lubricant, gear wear dropped 30 to 40%, overheating ended, maintenance was no longer a problem. In the 3 years we've been using RPM Multi-Service Gear Lubricant, we haven't lost a differential drive or bull gear. This lubricant also stopped gear galling and roughing of bearings in transmission." Firm's trucks make 2 to 3 round trips a day from logging shows to mill...average 5,000 miles a month each.

For More Information on this or any petroleum product, contact your Standard Engineer or Representative, or write 225 Bush Street, San Francisco 20, California.

TRADEMARKS "RPM" AND "CHEVRON" DESIGN REG. U.S. PAT. OFF.

Why RPM Multi-Service Gear Lubricant prevents wear

- Special compound forms protective coating on gears...resists rubbing action of hypoid gear teeth
- Withstands extreme temperatures and pressures...highly oxidation resistant...keeps bearings and gears cool
- Inhibitors resist rusting, stop foaming...lubricates integral bearings...will not separate

STANDARD OIL COMPANY OF CALIFORNIA

Modern Mills Manufacture Cedar Shakes with Modern Equipment, Bundle With Strapping

RESAW at M. R. Smith Shingle Co., Mineral, Wash. is 42" Tannewitz. Boards come directly from splitter. Saw cut is made diagonally the length of board. Smooth face of shake makes easier application, exposed side stays rough.

CRESCENT 36" resaw, also at Seattle Cedar Lumber Mfg. Co., Seattle, Wash. is used to saw 1-in. or 1¼-in. thick boards into two shakes. Cut is made diagonally full length. Shakes are next bundled and then kiln dried.

BUNDLING handsplit and resawn cedar shakes at M. R. Smith Shingle Co., Mineral, Wash. Foot pedal pulls side hooks down to tighten bundle while ½" Acme galvanized steel strapping is put around it, 4-6 bundles to square.

split. This achieves a natural, shingle-like taper from butt to tip. Both sides of the taper-split shakes have a natural rough face.

Hand-split-resawn shakes are made by sawing blanks about 2½-inches thick diagonally on a bandsaw to make two shakes. Each of these shakes then has a natural rough face and a smooth, sawn back. Resawn shakes present a rougher surface than natural tapered shakes and have a greater variance in thickness. The straight-split shakes hold about ½-inch thickness all the way. To obtain this a smooth split is necessary and, consequently, better cedar is required. There are several grades of resawn shingles based on length and thickness. Thickness varies from ¾-inch at the butt to 1¼-inch, the latter being most popular.

FOLLOWING MANUFACTURE, shakes are always bundled. They are also sold in bundles, or more commonly in squares. It takes from four to six bundles to make a square, depending upon the size and thickness of the shakes.

Most shakes are shipped green, but some of the more modern mills are kiln drying them first. This is especially true where the shake operation is in conjunction with a shingle mill. Shakes can be dried in the same kiln with shingles and require no special drying schedule. Drying the shakes has been found to be of great advantage in savings affected on freight, especially on long hauls.

Not Trade Organized . . .

Throughout the Pacific Northwest many people are involved either directly or indirectly in production of cedar shakes. Many of them, particu-

Resawing Operations Produce Handsplit and Resawn Shakes from Blank Stock

MAKING SHINGLES at M. R. Smith Shingle Co., Mineral, Wash. Large saw behind operator automatically slices off tapered shingle boards from blocks sawn to length. Mill has six of these units.

RESAWING handsplit "blank" to make handsplit and resawn shakes at O. E. Haynes & Sons, Inc., Eatonville, Wash. Cut is made diagonally length of board. Resaw is 36", has 1¾-inch blade.

larly the logger or farmer, are involved only on a part time basis.

The economic importance of the shake cutter is threefold:

- He is gainfully employed with a minimum of capital investment.
- He is supplying raw material to a growing industry which could not on its own weight, in most cases, support itself by the necessary investment in land, timber, and equipment.
- By far the greater part of all shake operations are salvage operations. Cedar is being utilized which for any other reason would not be taken out of the woods.

sound wood. At that time it was not economically feasible to harvest cedar. Other material being salvaged is the result of fires, blowdown, old age, and the residue of normal logging operations.

Big and Little Mills

There is a wide range in the size of producers of red cedar shakes.

One of the smallest is the John Bloom & Son shake mill at Elbe, Wash. This efficient little mill is a father and son operation, with a third man coming in to help out on the splitting at times. They saw 75 to 100 bundles per day.

Sizes, Packing Rules, Coverage Chart for Handsplit Cedar Shakes

Length & Thickness	No. of Courses Per Bundle	No. of Bundles Per Square	Approximate coverage of one square based on following weather exposures (Sq. Ft.): 5½"	6½"	7"	7½"	8"	8½"	9"	10"	11"	11½"	13"	15"
18"x⅜" to ¾" H&R*	10/10	4	55	65	70	75	80	85						
18"x¾" to 1¼" H&R	8/8	5	55	65	70	75	80	85						
24"x⅜" to ⅝" H&R	10/10	4		65	70	75	80	85	90	100	110	115		
24"x½" to ¾" H&R	10/10	4		65	70	75	80	85	90	100	110	115		
24"x¾" to 1¼" H&R	8/8	5		65	70	75	80	85	90	100	110	115		
32"x¾" to 1¼" H&R	6/7	6							90	100	110	115	130	150
24"x½" to ⅝" Taper-split	10/10	4		65	70	75	80	85	90	100	110	115		
18"x⅜" Straight-split	19 straight	5	65	75	80	90	95	100						
24"x⅜" Straight-split	16 straight	5		65	70	75	80	85	90	100	110	115		

*H&R—Handsplit & Resawn

Individual shake cutters, scattered and isolated as they are, are not organized. The manufacturers do, however, have an organization, the Red Cedar Shingle Bureau, with offices in Seattle, Wash. and Vancouver, B. C. The organization lists some 60 members throughout Oregon, Washington, and British Columbia. The Bureau maintains a strict inspection department, and labels every bundle meeting the quality requirements "Certi-Split". Standards and rules throughout the industry are set by the Bureau. Virgil G. Peterson is Secretary-Manager.

Most of the cedar being utilized was knocked down for one reason or another during the original logging of the area. Some of this has been on the ground 40-50-60 years, and still yields

Much mechanical ingenuity is found in the efforts to increase the efficiency of various shake mills. Typical is the mechanical splitter at the O. E. Haynes & Sons mill at Eatonville, Wash. The splitter, designed by O. E. Haynes, resembles a guillotine. Continuous strokes are timed slow enough to permit the operator to turn the blocks for the desired splits. This mill produces 200 to 225 bundles or 50 to 55 squares of shakes per day.

ONE OF THE WORLDS LARGEST producers of red cedar shingles is the M. R. Smith Shingle Co. This company has five plants, and the one at Mineral, Wash. has a shake mill in conjunction with the shingle mill. About 40 men are employed in both mills. At this mill it has been found to be a big advantage to be able to ship mixed cars—shingles and shakes—and thus help move both types of stock.

Occasionally a shake mill has become established as a department in a lumber mill, as in the case of Seattle Cedar Lumber Manufacturing Co., Seattle, Wash. At this plant the incorporation of a shake mill has proved to be a definite asset in several ways. It was installed primarily to utilize splits and slabs that develop in the sawmill and are not wide enough for desirable lumber cuts. In this way a nuisance is profitably eliminated.

There are also the instances when 24-foot logs come into the mill. Logs 20 feet long are ideal for the sawmill. Rather than make two 12-foot logs of a 24, four feet are cut off. This four-foot block is then halved, making two 24-inch blocks for the shingle or shake mill. This all-cedar mill has also found it desirable to have shakes to put in mixed carloads, with shingles and siding.

Advantages of Using Shakes

These are some of the advantages gained by using handsplit cedar shakes in construction.

- **Natural grooves lead water off end of shake and never over side. These grooves appear in splitting, and mark the difference in annual rings between soft spring wood and harder summer wood. These grooves deepen with age, as softer wood wears away, making even better conductors of water.**
- **Air circulates under and around each shake. No matter how carefully and uniformly shakes are applied, this important circulation can take place because of natural roughness of shakes. This accounts to a large degree for long life of shake roofs.**
- **A shake roof is lighter. Supporting structures can be lighter. For instance, underlayment of a roof can be spaced sheathing rather than solid sheathing. This feature also insures better circulation.**
- **Application of shakes means better insulation.**

Philippine Mahogany Body Honors Walter Scrim

- Walter G. Scrim, president of the Philippine Mahogany Association, Inc. for the 30 years of its existence, retired from active service to the association at the recent annual meeting of the group held at La Jolla, Calif. However, he was elected president emeritus in recognition of his many years of faithful service to the industry.

At the meeting it was reported that sales of Philippine mahogany lumber have nearly doubled in the past five years. Further expansion is limited only by the amount of lumber available for export to the United States and Canada.

The association also reviewed its advertising program which is cited as being largely responsible for the general acceptance of Philippine mahogany.

New officers of the body are Henry S. Thompson, Philadelphia, Pa., president; C. J. Atkinson, Toronto, Canada, vice-president; George D. Scrim, South Pasadena, Calif., executive secretary-treasurer; H. V. Coffey, Los Angeles, Calif., assistant-secretary.

Colorado Mill Burns

The Dunton, Colo., sawmill of Hanson Lumber Co. was destroyed by fire in July with the loss set at $150,000. The mill was built two years ago. No plans for rebuilding have been announced.

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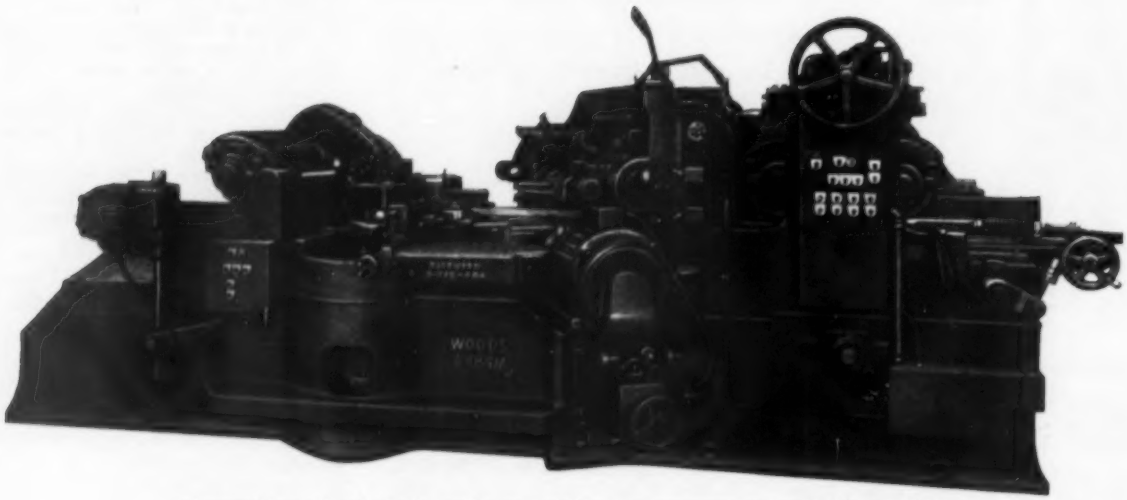
It's Revolutionary!

A-484M DIAGONAL PLANER and MATCHER



Ungrading of all stock, with astonishing improvement in finish on the lower grades now made possible with this revolutionary DIAGONAL PLANER and MATCHER.

DISTINCTIVE FEATURES

- ★ Elimination of sniped ends.
- ★ Smoother finish around knots and cross grain, with less tendency to loosen knots.
- ★ Continuous support of stock on bed plate before and after cut on bottom head.
- ★ Less lead required in guide as angle cutterhead serves to hold stock against the guide fence, preventing side friction, feed roll wear and edge sniping.
- ★ Less power consumption in feeding stock.
- ★ All operating adjustments can be made from the front or working side of machine.
- ★ Wide face helical gears for feed works, assuring continuous tooth mesh and quieter operation.
- ★ Independent quick green stock lift for first bottom feed-in rolls.
- ★ Bottom head cylinder can be pulled out for changing knives without disassembling motor.
- ★ Individual ball bearing housings for all cutting units.
- ★ All ball and roller bearings housed in dustproof housings. Grease lubricants for roll bearings. Regulated wick oil feeders used on all cutting units. Forced feed lubrication for feed gears.

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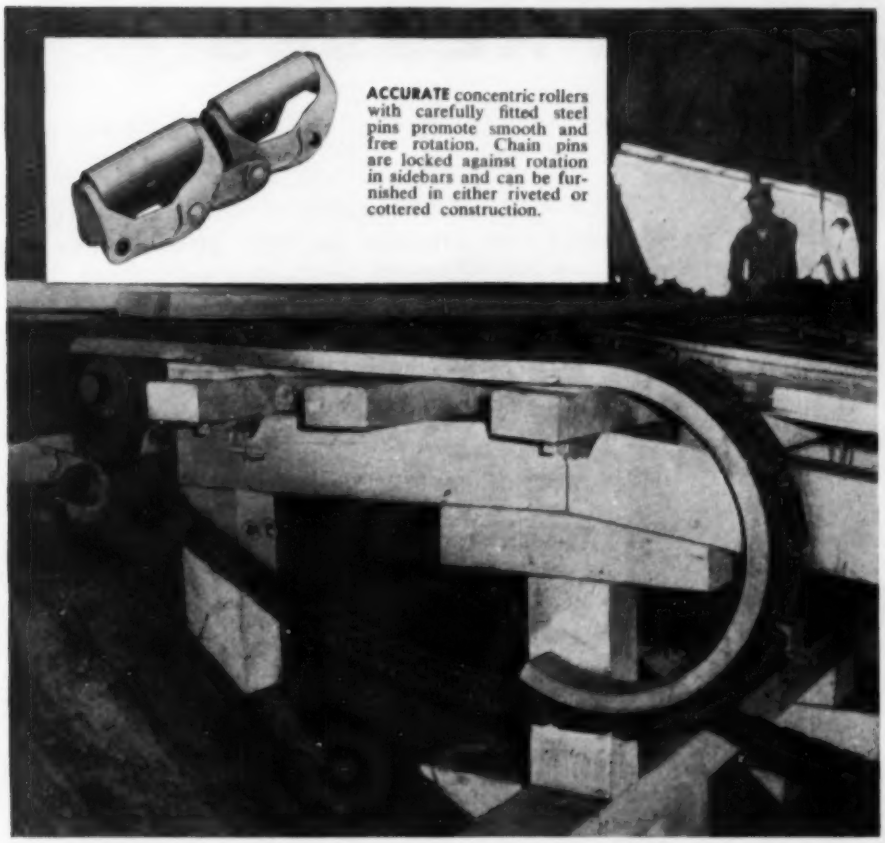

ACCURATE concentric rollers with carefully fitted steel pins promote smooth and free rotation. Chain pins are locked against rotation in sidebars and can be furnished in either riveted or cottered construction.

Simplifies, speeds sorting of various sized planks, boards

Narrow boards and wide planks roll off easily and one-at-a-time when Link-Belt roller-top chain is used for the handling and sorting of lumber. This is another example of Link-Belt's ability to provide the one chain best suited for a specific operation.

Faster handling

Free-turning rollers, mounted parallel to conveyor travel, provide ample surface for fast, orderly handling of boards at any point along the line. Their smooth, free-rolling action minimizes manual effort . . . reduces fatigue.

Quality-made parts

Sturdy, concentric rollers are accurately shell-molded and mounted on cold-finished pins to assure free-turning action under load. This not only makes removal of boards easier but also reduces wear on chain parts.

Chain body is made of malleable iron and is generously proportioned for maximum strength under heavy loads. Broad base provides stability and adequate support of loads. Wide bottom wearing surfaces increase chain life and minimize maintenance.

Link-Belt roller-top chain boosts production, conserves manpower

LINK-BELT ROLLER-TOP CHAIN is the low-cost answer to fast, efficient handling and sorting of lumber in modern mills.

ROLLERS CARRY BOARDS in orderly manner, prevent piling up, permit easy withdrawal of boards at any point.

FREE-TURNING ROLLERS are made of shell-molded malleable iron . . . reduce physical effort in handling boards.

LOW MAINTENANCE is assured by generously proportioned body of chain and broad, long-lasting wearing surfaces.

The above illustrations show how cost-conscious lumber mills use Link-Belt roller-top chain to increase sorting table production. In addition to faster, easier handling of boards and planks, roller-top chain conveyors improve working conditions. For an analysis of your sorting operation needs—without obligation—call your nearby Link-Belt office.

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Hardwood Hardboard Proven Product

Southern hardwoods put through tests in a western pilot plant have proved the feasibility of producing hardboard from hardwoods. The tests were conducted by Bowaters Fibreboard Co. at the Coos Bay Lumber Co. hardboard pilot plant in Coos Bay, Ore.

Results were so successful that Bowater has announced plans to construct a $7.5 million hardwood hardboard plant in the southeast in 1959. It anticipates a plant that will produce 500,000 square feet, ⅛-inch basis, every 24 hours. The product would be smooth two sides, four feet wide and 16 feet long, ranging in thicknesses from 1/10 to ⅜ inches.

Bowater started considering a use for a small southern hardwoods plant in 1954 when it began operating its paper mill in Calhoun, Tenn. Large amounts of hardwoods being cut with the pine had no use. Why not hardboard, reasoned Bowater. The dry process being used by Coos Bay Lumber Co. to produce a softwood hardboard in a process worked out by Dr. John Meiler caught Bowater's eye.

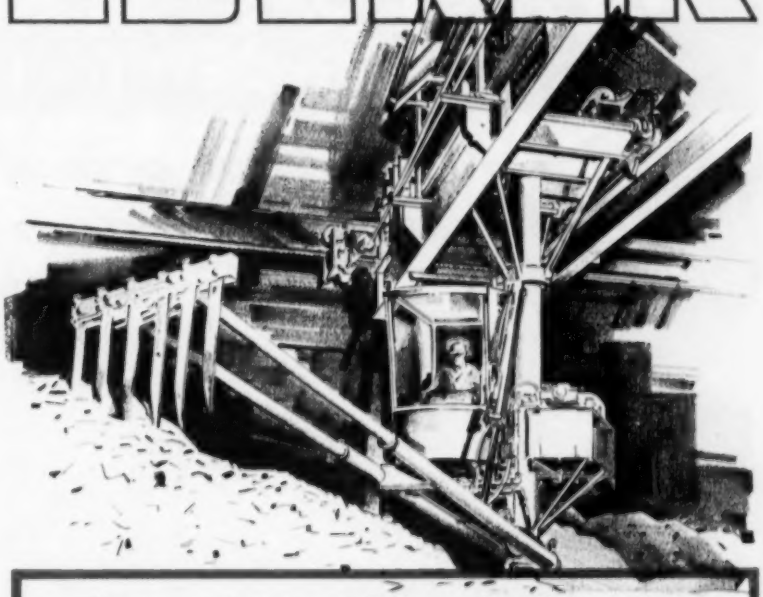
Early in 1956 K. O. Elderkin, then vice-president and general manager of Bowaters Southern Paper Corp., now president of Bowaters Research and Development Co., signed a year's lease for use of the plant. Fortunately, Dr. Meiler was also available.

John G. Robinson of the Bowater organization and formerly with Weyerhaeuser Timber Co. at its Klamath Falls, Ore., hardboard plant, was placed in charge of the project. During the year-long tests, 20 carloads of southern hardwoods were shipped to the pilot plant. They included oak, gum, hickory and poplar, with some samplings of a number of other southern hardwoods. Oak, in a number of different varieties, was predominant.

Additions were made in the Meiler process before the desired hardboard stock was secured. A vacuum filter system was used to provide better control of the mass of fiber. Numerous batches were tested, some of wood of a single species, others mixed. Color was the one chief difference noted, with darker shades resulting from batches in which oak and other dark woods were used.

The hardboard specimens secured from the test runs, according to Robinson, have virtually the same qualities as softwood hardboard and will compete with softwood products in the hardboard field. Each variety probably is superior for some specific uses, but in general they are competitive, he says.

EDERER



Two men with pitchforks used to do this job . . . "backscratcher" does it now!

In the opinion of EDERER engineers, there's a better way than sheer manpower and pitchforks to move piles of hog fuel. So—they put a rake on a crane—a giant "backscratcher"—that enables one man to do the job faster, certainly more easily—and more safely too.

The rake operates hydraulically from the crane's trolley. The operator sits in an enclosed control cab. The rake can push or pull; reaches from the floor to 20 feet in the air; has a 17-foot horizontal reach with a seven-foot stroke. Cab and rake will rotate 280 degrees.

EDERER "job-engineering" has licked countless such problems in specialized equipment for the plywood and lumber products industries. Let's talk about your requirements.

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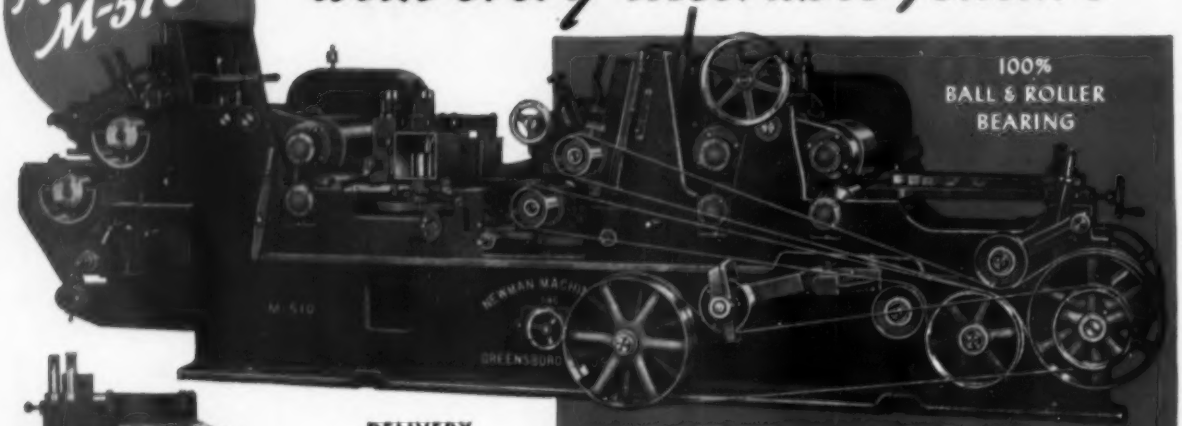

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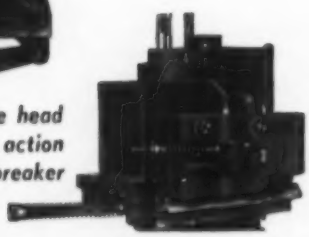
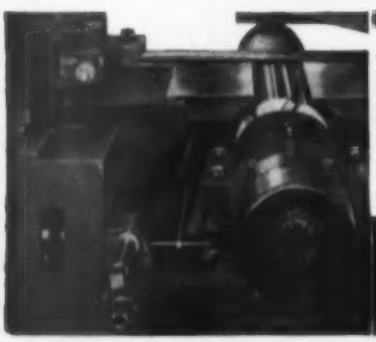
Heavy duty side head units of long quill design



Left side head double action chipbreaker



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GREENSBORO, NORTH CAROLINA, U. S. A.

To Cut Out Most Fillet in Redwood . . .

Which is Best, Cant Gang or Pony-Resaw Combination?

By WALTER G. COLLINS, Consultant
Fort Bragg, California

IN TERMS OF ROUGH, green lumber and calling Uppers, Clear and Aye grade only, what is the best tool to use in order to recover the greatest value from the size and type of logs available to your plant, taking into account your fixed layout, mill capacity, percentage of species, your company objectives and sales policies?

Average return on upper grades, rough, green is from $60.00 to $70.00 per M more than the average return on commons. Each one per cent increase in the recovery of uppers,—and corresponding decrease in commons, adds about $1.00 per M to the average return on total output of rough, green redwood, on recently current prices. Price of redwood uppers has held relatively stable and they are consistently more marketable without sacrifice in the up and down swings, than are commons.

This justifies straining to get maximum in upper grades. This may start with the woods in better bucking and handling practices and carry through sawmilling.

How to get the most out of shop cants? Clear cants are going to give upper grades anyway, regardless of how they may be sawn,—either by a gang, a pony-resaw combination or even on the headrig. We should consider some saving on kerf, which is important and the possibility of increasing the percentage of vertical grain, which also is important, provided our conditions warrant capital investment to try to attain the ultimate. But, we should think of shop or knotty cants only,— the best means of sawing those at right angles to the face to insure the greatest recovery of upper grade lumber between the knots.

ONLY PRESENT CANT GANG operations are in Humboldt County, where the logs will average larger and carry a greater percentage of uppers, —particularly clear and perhaps generally more shop and large knots than found in the more southerly portions of the redwood belt. The only pony-resaw combination is operating at Union Lumber Co., Fort Bragg, where the logs are smaller, in some respects sounder, and more given to small tight knots. Size and characteristics of the timber must weigh heavily in arriving at choice of most practical tool to be used. There is more flexibility in the pony-resaw, especially in recovering the most saleable material through varying thicknesses and widths from the lower grade cants. The sawing pattern is not rigid.

Given modern equipment and controls and assuming that both the gang and the pony must be regarded as part of a self-contained process complete with edger and trimmer, there appears to be little difference either in hourly production or production per man hour, between the two. This might also be an approximately correct statement for initial cost. The fact that in all present installations, the tool fits into already installed mill processes, is apt to be misleading. It is questionable if any of the present layouts have all the factors necessary to develop maximum potential. So direct comparisons may well be deceptive.

Probably only about a half dozen redwood operations are large enough to justify the investment in either a gang or pony installation and keep them reasonably supplied with raw material, properly installed they cost plenty of money. A third alternative may well be within the reach of small and medium mills, as a means of going quite a way in the direction of retrieving more dollars through better grade recovery.

To illustrate: assume a mill cutting say 100 M per shift in redwood, might develop about the usual 25% or 25M per shift in gang cants as they are presently being graded, of which about one-third would be clear cants, which would eliminate from the present calculations; so there would be only about 17M per shift in shop cants to work on. Either a gang or a pony would eat that up in less than two hours.

The factors are volume of raw material available, capacity and economics. Some excellent small and medium mills are getting surprising grade recovery considering their type of logs, whose owners feel that it is profitable, even at the expense of occasionally slightly slowing down head rig production by excess turning and manipulating the log on the carriage, to go strong for uppers and vertical grain.

This applies where they have a band mill; with a circular it may be doubtful. If they can afford a relatively inexpensive line bar resaw with all its flexibility, the recovery may be greatly improved without reducing, but actually slightly increasing headrig performance through greater volume per line sawn, by coming up with squares that can be turned at the resaw for grade and vertical grain.

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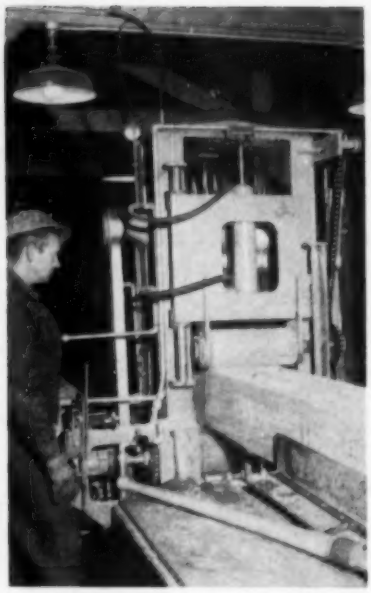
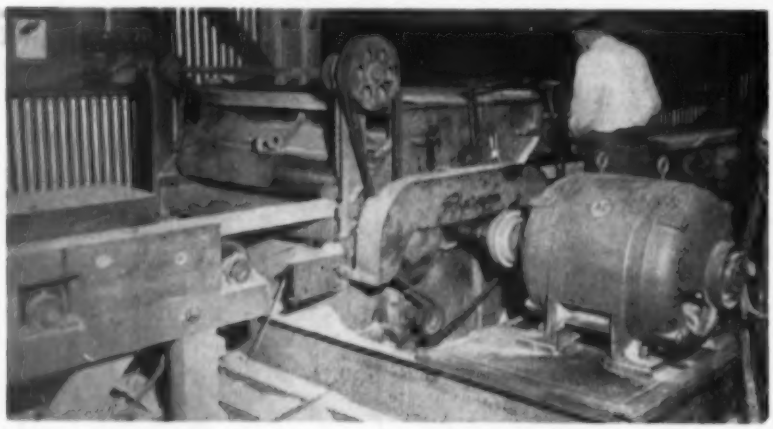
CONVERTING logs into squared cants with Lester scragg mill is the first unit of the salvage mill. Slabs discharge on either side, cants conveyed to gang mill.



BREAKDOWN unit for the cants behind the scragg is this Jeddeloh gang mill.

Designed to

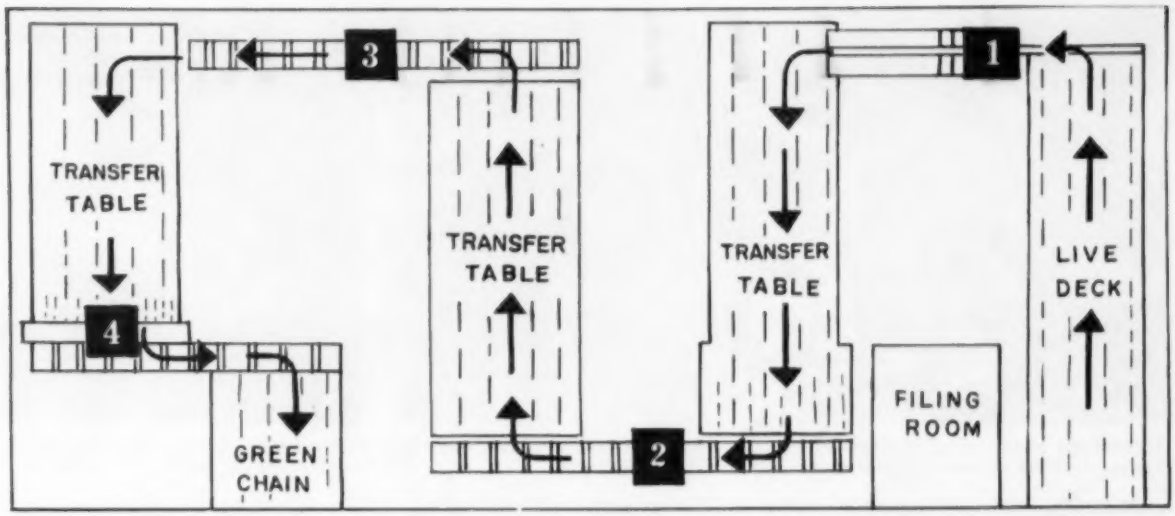


EDGING of all lumber behind the gang mill is handled by this Schurman 6x48-inch edger. The edger is powered with a 100-hp Allis-Chalmers motor.

PRINCIPAL EQUIPMENT: Scragg mill, Lester Machine Co., Seattle, Wash.; Edger, Schurman Machine Works, Woodland, Wash.; Gang mill, Jeddeloh, Gold Hill, Ore.; Trimmer, Irvington Machine Works, Portland, Ore. Scragg mill has hydraulic saw positioning and feed equipment. Feed rolls on gang saw powered with Allis-Chalmers motor through Falk speed reducer. Has air controls. Edger powered with 100-hp Allis-Chalmers motor.

TRIMMING for the mill production is handled by this Irvington selective trimmer. Recovery is high.

SALVAGE mill designed to process 35,000 feet daily of salvage timber.



FLOW CHART of the Simonson salvage mill illustrates the compact and uninterrupted lumber flow. No. 1, Lester scragg mill; No. 2, Jeddeloh gang mill; No. 3, Schurman 6 x 48 edger; No. 4, Irvington trimmer. Seven men operate the mill.

Cut Salvage Material Economically

An unusual mill, designed and built expressly as a vehicle for economically converting potential timber lossage into well-manufactured lumber, was placed in operation recently by Simonson Logging Co. at Smith River, Calif. This salvage mill is a short distance from the company's redwood mill.

The situation confronting the organization, as pointed out by Leland Simonson, manager and co-owner, involved several million feet of company timber on logged-over lands. Actually it had been left as a residual young-growth stand from the original logging to provide for future productivity.

Looking over portions of the logged-over area early in 1956, Mr. Simonson ascertained that a large portion of the residual stand was in need of urgent salvage. Winds here on the Northern California coast had taken high toll in some of the selectively cut areas. As a result, millions of feet of down timber presented a pressing salvage problem. Mr. Simonson felt the small diameter size of this timber precluded economical processing in the company's redwood mill.

A dual problem thus confronted the organization: Develop a salvage logging operation to economically deliver this material to the plant (the solution of this phase to appear in May 3, 1957 issue THE TIMBERMAN), and to design and build a sawmill to efficiently convert the salvage fir and redwood logs into quality lumber.

Keen interest has been displayed by various operators in the resultant sawmill designed by Sales Mgr.-Asst. Plant Mgr. J. H. Hess and Sawmill Supt. Ben Schindler which went into production last February. As will be noted from the mill-floor layout, stock flows directly from one processing component to the next practically without operator handling and no re-routing. According to Mr. Hess, the mill has one-shift rated capacity of 35,000 bd. ft. and has an over-run of 20 to 25% of lumber over log scale.

Simonson's salvage mill has no log pond. Instead the logs are "dry handled" by Hyster fork lift from the time they arrive at the mill area via logging truck until placed on live chains of the mill deck. These logs are wrapped with Acme steel strapping before the Hyster removes them from the truck as bundled units. It's in this form that logs generally arrive on the mill deck, whether they come directly from the woods truck or the local storage decks. The bundles are broken on the mill deck by cutting and removing the straps.

Processing Steps:

A Scragg-type headrig (built by Lester Machine Co., Seattle) equipped with hydraulic log positioner and feed-through chain, squares up each log in two passes. The first pass faces two sides after which the log returns to feed side of the saws, is turned 90° and again pressed through the 2-saw headrig. Slabs are kept thin to turn out the largest possible bark-free square from any given log. The resultant slabs discharge by gravity into a steel chute terminating at a conveyor which receives residues from the entire mill.

Transfer chains deliver the square to a 16x20-in. Jeddeloh "Swede" gang which converts it into lumber: Douglas fir into 2-in. stock, redwood into one-inch boards. A delayed-action trip at the bumper end off-bearing rolls behind the gang facilitates, "even ends" the boards before being removed from the rolls by a chain transfer. Edging is through a Schurman 6x48-in. edger. An Irvington selective gang trimmer is used for final in-mill processing.

Each of these processing components is operated by one man. In addition, it takes one deck man and two on green chain—a total of seven production men for entire mill from deck to green chain, inclusive.

BREAKDOWN of logs is first handled with this 54-inch Allis-Chalmers single band headrig. Carriage designed by owners. Offbear sawyer has foot control for transfer.

CONTROLS for carriage feed and setworks are handled by sawyer at control panel.

A seven man crew handles this

Successful Hardwood Operation

and its diversified product manufacture

Multi-product manufacture is building an efficent hardwood operation for George Owen and his Hardwoods, Inc., in Eugene, Ore. Furniture squares are the primary product, but included is an array of other products: butcher blocks, boiler compound, mulch and cattle feed in the firm's expanding operations. An independent furniture company also operates nearby, obtaining its raw material from the mill.

To do this, Hardwoods, Inc., managed by Owen's son, Richard, operates a straight-line, production flow bandmill, producing 20,000 feet a day; a 50,000-foot capacity dry kiln; cut-up plant, and a by-product pilot plant. His 7-man crew mans the entire operation.

PRIMARY PRODUCTION unit, the bandmill, uses a 20-foot, two-block riderless carriage and setworks both designed by Richard Owen. The setworks uses sawyer-operated toggle switches which activate limit switches on the carriage, controlling pre-set cutting intervals including allowance for kerf. It can control 4, 5, 6, 8, 10 and 12/4-inch cuts. The sawyer operates the log deck chain and hydraulic loader and turner in addition to his normal sawing duties.

The entire mill crew consists of two men on the pond, the sawyer, tail sawyer, edgerman, trimmerman and one man on the green chain.

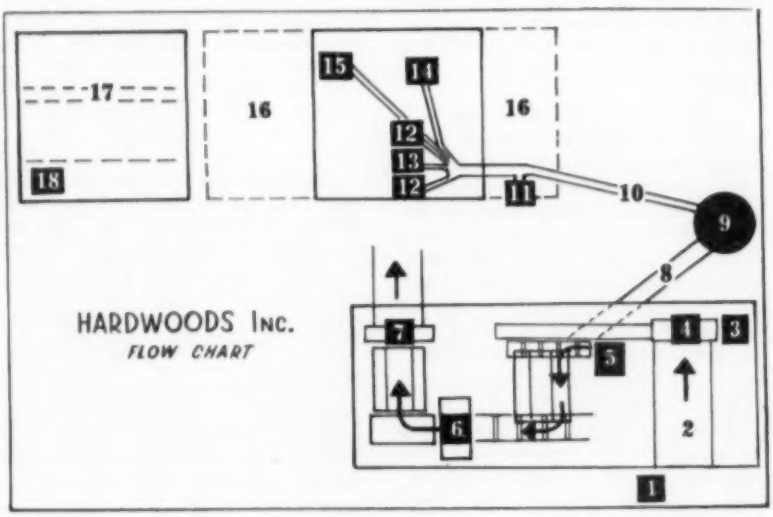
Oak, difficult to float, is placed on the log deck with a Lorain ½-ton shovel, but alder, maple and ash are floated on the pond. Hemlock is also occasionally cut.

ALL LUMBER IS DRIED by the Lovsted dry kiln. The Cleaver Brooks boiler operates at low pressure, 15 psi, which does not require a constant boiler room attendant. The boiler is oil-fired using inexpensive grade PS 400 oil. Owen uses standard drying schedules for hardwoods developed by the U. S. Forest Products Laboratory, Madison, Wisc.

The two-track kiln is of aggregate block construction with laminated wooden roof and 15-foot high doors. It uses Foxboro controls and has five

The Mill Flow Chart

1. Blue Babe 5-foot pondsaw
2. Log Deck
3. Skeen 30-hp electric feedworks
4. Owen-built 20-foot 2-block carriage
5. Allis-Chalmers 54-inch band headrig
6. Burton 4x30 3-saw edger
7. Prinoville Machinery & Supply 2-saw trimmer
8. Sawmill residue burner conveyor
9. Eugene Truck and Machinery 40x40 Burner
10. Blowpipe for sawdust and shavings from cutup plant
11. Turner Machine Co. 8x12 48-inch vertical band resaw
12. Irvington Model A cutup saws powered by 2-hp Louis Allis motors
13. Industrial Machine Mfg. Co. cutup saw
14. Diehl 99 gang ripsaw
15. Dependable M150 4x10 moulder with cartridge head
16. Storage sheds
17. Lovsted dry kilns
18. Cleaver Brooks boiler



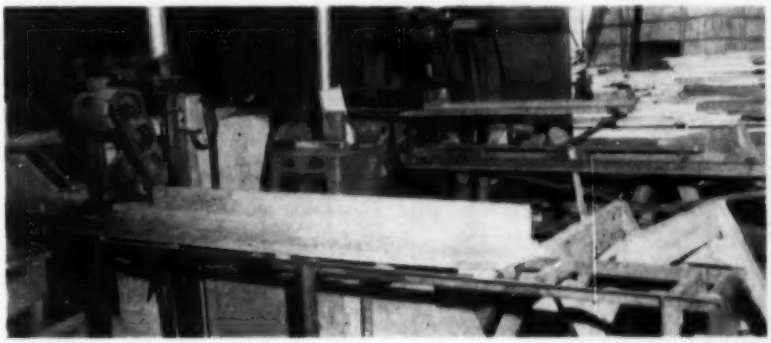
PRODUCTION floor showing band mill in background, Burton 3-saw edger at right and Prineville trimsaw at left. This is main breakdown mill floor for the hardwood logs.

PULLING from the 60-foot green chain is handled by one man sorting for length.

84-inch aluminum fans operating at 190-rpm. The aluminum lowers the heavy starting stresses because of its light weight. It also discourages fan corrosion. The fans which move 36,000 cubic feet per minute are driven by 3-hp Sterling motors.

CREW SHIFTS: The kiln, storage sheds, cutup shop and resaw are all located in line for efficient movement of stock by Hyster lift truck and lumber carrier. As the kiln cannot dry lumber at the cutting capacity of the bandmill, the operation of the mill is geared to the kiln's capacity. The mill runs for two or three days and then the entire crew is moved over to the cutup plant and resaw to further process the dried lumber. This makes possible the operation of the whole production unit with the small crew moving back and forth between the two operations.

Turner resaw, a vertical band unit, is used to split some cants to special order thicknesses. In the adjoining cutup shop a gang ripper further reduces the stock to the smaller dimensions required for the furniture squares, mostly 1 5/16-inches square. A moulder produces matched edges where desired.



BREAKDOWN saws in cutup plant showing the two Model A Irvington cutup saws. Center saw is Industrial Machine, operated by air foot pedal. Start of manufacture.

DRYING of lumber is all handled by this oil-fired Lovsted dry kiln with 50,000-foot charge capacity. Speed of operation is keyed to the drying process time.

BY-PRODUCT boiler compound made from boiling hardwood bark and sawdust here.

BUTCHER blocks are made in this frame, shown by Guy J. Bailey, partner in Forest Gold Products. Waterproof glue is used. Pressure applied by tightening frame.

FURNITURE parts being glued up at Custom Finished Furniture, Inc., by use of Weldwood electronic gluer. Handles up to 38-inch widths. Stock furnished by Hardwoods, Inc. TOP RIGHT: Pallets of furniture squares ready for shipment at Hardwoods, Inc., plant. Signode strapping used. LOWER RIGHT: Assembled chest made by Customer Finished Furniture, shown by manager Stuart C. Smith, left, and design and production superintendent, Gene Williams. Plant produces 50 units daily for market.

The three cutup saws are operated with lever stops set to order-lengths which are from seven to 30 inches. The large number of pieces handled in these small sizes results in a great amount of handwork in both cutting and handling. No shortcut has been found for feeding the cutup saws, but Owen has made use of hardwood pallets to enable lift truck handling.

PALLETIZED HANDLING: Black cottonwood, cut in the mill is used for the 3x3-foot pallets. The cottonwood is tough and sturdy for its minimum weight. A completed pallet weighs but 25 pounds with pallet stock dried to 15% moisture content.

Three 2x4-inch footings with 1x9-inch deck boards are used. Two nails are used on each end of the outer decking boards with but one nail used on each end of the center boards. This economy in nails has made some savings without sacrificing strength. The pallets are considered expendable.

The pieces are stacked on the pallets 18 wide and 20 high with stickers placed between each course of five high for stability in stacking. Signode .002X½-inch strapping is used with a seal feed sealing machine. Four to six bands are placed around the units vertically with one used horizontally near the top.

A Clark Clipper lift truck, 42 inches wide, provides the maneuverability necessary for moving the small stock around the cutup plant. A counterweight on the rear of the machine gives a 2,000-pound capacity, although most bundled units weigh about 1000 pounds.

"Handling costs of small pieces could be prohibitive if we didn't handle them in this manner," Richard Owen said in describing the handling operation.

The small lift truck can also operate inside semi-trailers and railroad cars to facilitate stacking. Shipments are made by rail and truck with most production going to the southern California furniture market. Market is not lacking for the material with 332 furniture factories located in Los Angeles, alone.

SIDELINES INCREASE USE: Forest Gold Products Co. is operated by George Owen and Guy J. Bailey, Veneta, Oregon, in conjunction with the mill. It is in the process of setting up the special products dependent upon residue utilization from the mill.

Wood waste fertilizer will be put out on a franchised process with oak and alder sawdust being fed into a hammer mill. They add nitrogen to replace that taken from the soil as the sawdust rots. Other soil-building chemicals are also added in the process.

A further use of the material is contemplated, adding other ingredients and using it as cattle and chicken feed. Owen and Bailey have experimented with the material on cattle and chickens with satisfactory results. Fir sawdust is not useable for this because of the resins it contains.

Another sideline is hardwood butcher and carving blocks. The production utilizes trimmings as short as two inches placed in a rectangular steel frame after being spread with waterproof glue. Pressure is applied through screws on the side.

Both the large end-grain blocks for butcher shops and small flat grain cutting boards for home use are produced. The butcher blocks are fabricated up to 36x36x16 inches.

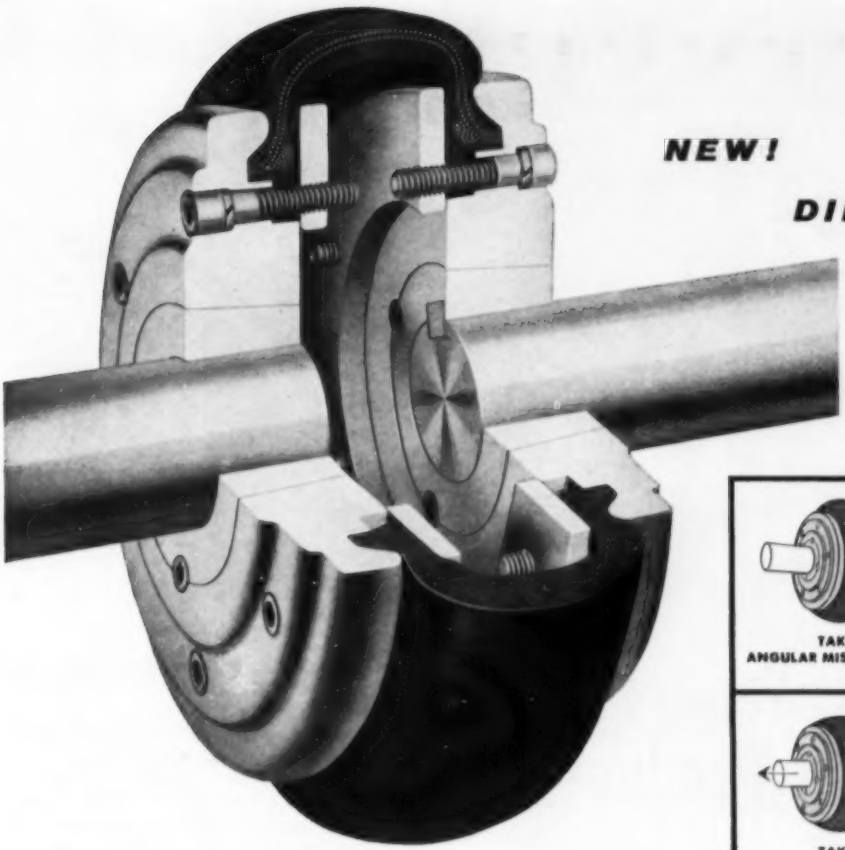
A specialty also is a flat-grain board 12x21 inches with ½-inch rubber legs and ⅜-inch nails spaced to hold roasts. Channels are routed out of the board to channel the juices to one end while the roast is being carved. The blocks are dried down to 8% moisture content.

A further product is a boiler compound which is obtained by boiling bark and sawdust from oak, alder and hemlock. This product when introduced into boiler water tends to prevent corrosion, pitting and grooving—causes of expensive damage to boilers. According to Bailey, who developed the compound a number of years ago, it also dissolves scale which greatly decreases boiler efficiency.

FACTORY USES LUMBER: Customer Finished Furniture, Inc., is another operation geared to the production of Hardwoods, Inc., although it is not connected with Owen's company. The small operation produces some 50 furniture units of 11 different types in a 60x80-foot building section leased from Owen.

Stuart C. Smith is manager of the operation which generally employs five men producing cabinets, chests, cases and benches. All hardwood lumber from Hardwoods, Inc. is used. Production is in both knocked-down and assembled units—all unfinished—for the home finishing trade. Most shipments are made to the booming southern California market. Some furniture parts are also being produced.

Stock is furnished Smith with matched edges ready for the gluer and he uses a Woodwelder electronic gluer to build up the boards to desired widths. A width of 38 inches is the maximum needed.



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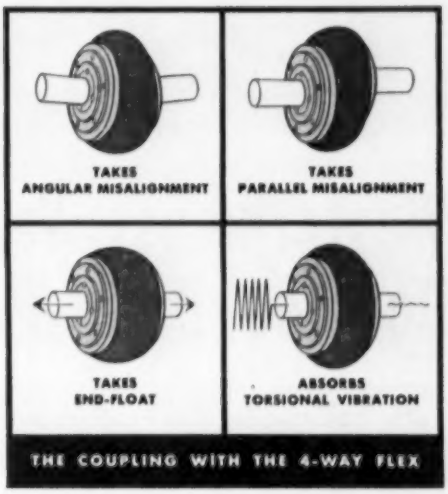

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Para-flex takes minimum space on the shaft. Mounting is simplified through the use of standard Taper-Lock bushings—no reboring, no machining. Safety is promoted by flush design; there are no protruding parts. No lubrication is required, no periodic inspection. And since the flexible member is molded with a transverse split, it can be replaced *without moving either the driver or driven machine.*

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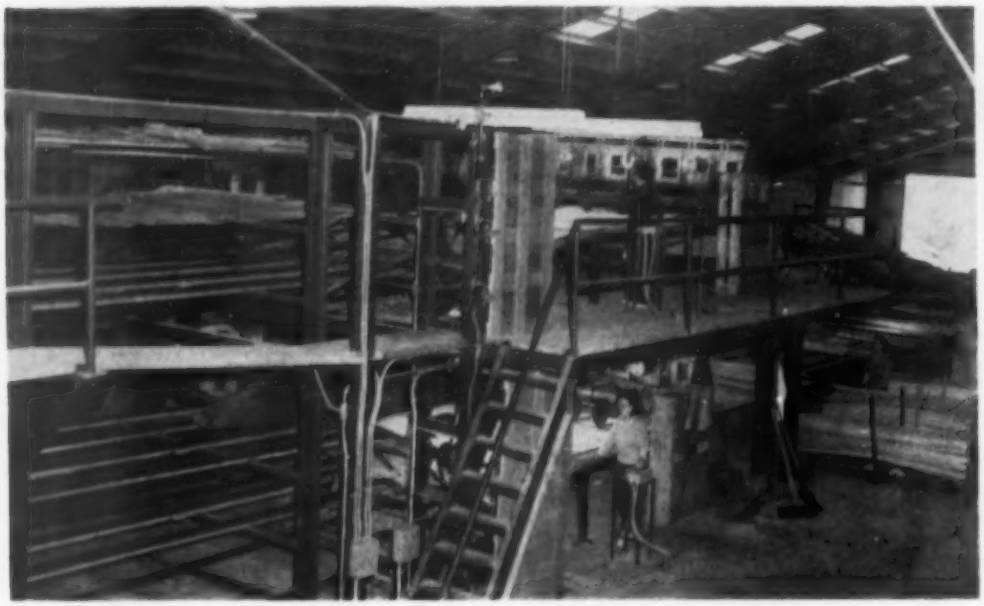


TWO ELLIOTT BAY semi-automatic clippers stationed one above the other receive stock from six tray system 120 feet long, at left. Sorting chain is 100 feet long, at the right.

Westernmost Veneer Plant Doubles Daily Production

Plant expansion program by Port Orford Plywood Corp. includes tray system, building extension, pond increase.

A PLANT EXPANSION program that nearly doubled daily veneer production resulted in almost the entire plant of Port Orford Plywood Corp. being rebuilt. At Cape Blanco, Ore., the plant is on the westernmost point of land in the United States.

A galvanized steel 80x150-foot Pasco building extension was made, pond size was vastly expanded, a tray system and a second clipper were added, and a new lathe and barker were installed. A core lathe is also planned for installation.

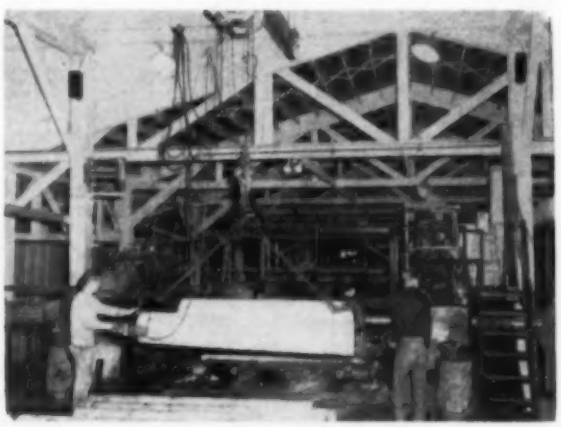
The plant is capable of producing, on a ⅜-inch basis, 100,000 square feet of veneer per shift.

Logs are bucked by double pond saw on the 45-acre pond which was expanded from a three-acre working pond. A Coast Metal Works "pond mule" handles logs in the pond. In the low lying area, it was necessary to pump water 2000 feet through a 10-inch steel pipe for pond filling.

From the pond saw, logs are rafted down a slip to the short jackladder serving the barker. Logs are chain-conveyed through the barker and then dropped back into the mill slip from where they are picked up by a log lift serving the short deck.

An overhead chain hoist traveling on a monorail charges the lathe. The tray speed is synchronized to the lathe's operating speed. Cores from

EUREKA Boilerworks barker, 90-in. diameter and 8 ft. length, is served by short jackladder. L-M pond saw bucks logs to length.



COE LATHE, with 84" swing, has Reeco variable speed drive. It is served by a Yale 5-ton hoist which runs on a monorail.

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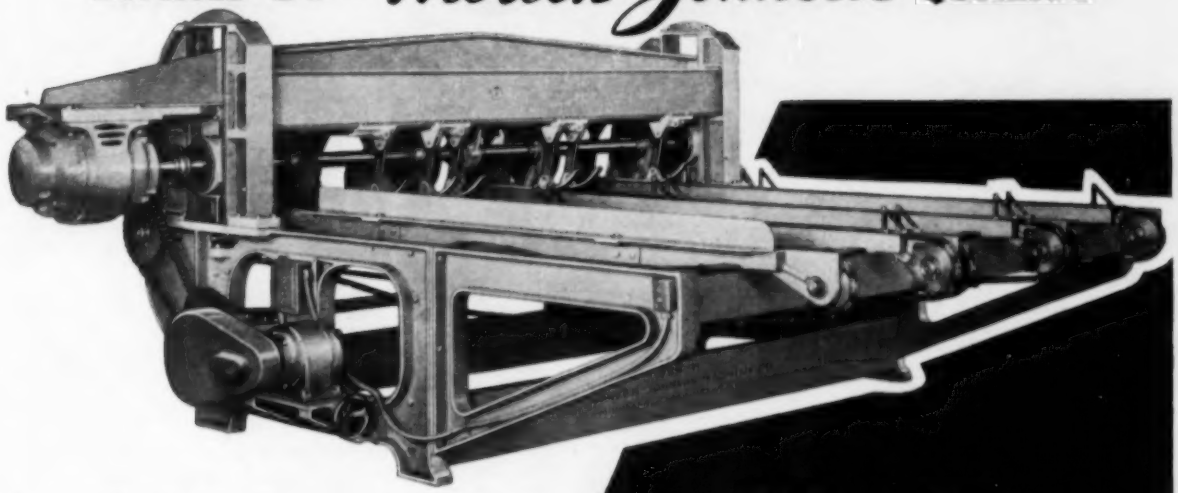


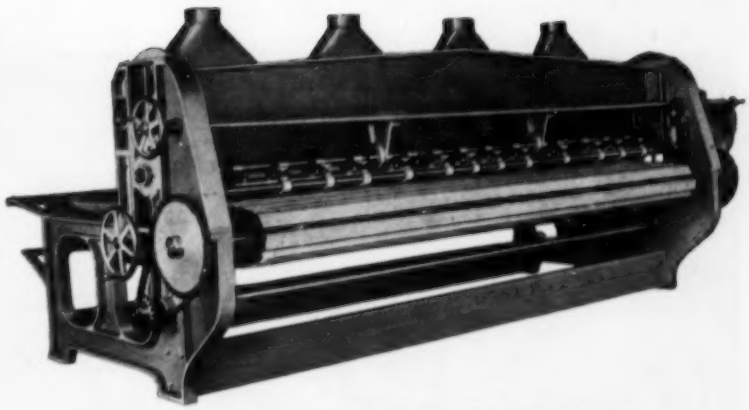
NO. 435

MULTIPLE CUT-OFF SAW EQUALIZER *and* GROOVER

IT'S BEST KNOWN AS A PLYWOOD SIZER. But this Mereen-Johnson machine has earned popularity in sash and door, furniture, cabinet and refrigerator factories, too. It will cut up long boards into short, accurate pieces . . . handle boards, panels or sheets of any size—cutting them perfectly square on both ends . . . cut any number of grooves of nearly every width on the same stock. It will even do these three operations *simultaneously*.

Special accessories permit its use for cutting multiple veneer, plywood and insulating material. It is often used as a slat bed cut-off and ripper . . . for dry saw cutting . . . for two-way cutting . . . and for grooving and trimming step-ladder sides.

Sizes run from 4′ to 24′. Let our engineers work with you to develop a combination unit that will fit your needs.



Rear View of 144x48 Slat Bed Machine

Write for Bulletin No. 435

Mereen-Johnson MACHINE COMPANY

4401 LYNDALE AVENUE NORTH • MINNEAPOLIS 12, MINNESOTA

ONE HUNDRED feet of green sorting chain receives stock from two clippers shown at far left. Automatic fishtail saw arrangement is at far right. This automatically takes stock suitable for core stock, cuts it to size and drops it on near side to sorting table for handling and taking to glue spreaders.

AUTOCAR diesel truck with Goodyear tires is being loaded with green veneer by Hyster forklift unit; Utility trailer. Truck belongs to Johnson Truck Service, Tillamook, Oregon.

OFFBEAR END of lathe showing the speed synchronizer. Device on the lathe speeds up when lathe speeds up, allowing counterweighted chain to operate speed control for the trays.

the operation go to the Douglas Fir Lumber Co., Nesika Beach, Ore., where they are cut for studs.

The lathe feeds a 120-foot six-tray system which, in turn, serves two semi-automatic clippers. A 95-foot sorting chain has eight sorters at work.

Fishtail stock is salvaged at the end of the sorting chain with a tipple lowered to the end of the chain when such stock comes by. It is then conveyed across and up through automatic squaring devices to the two fishtail saws. The salvaged stock then drops to a sorting table behind the saws.

Refuse drops down onto the burner conveyor chain when the tipple is raised. A 50-foot burner takes this refuse with an identical unit taking roundup and other refuse from the lathe as well as the barker refuse.

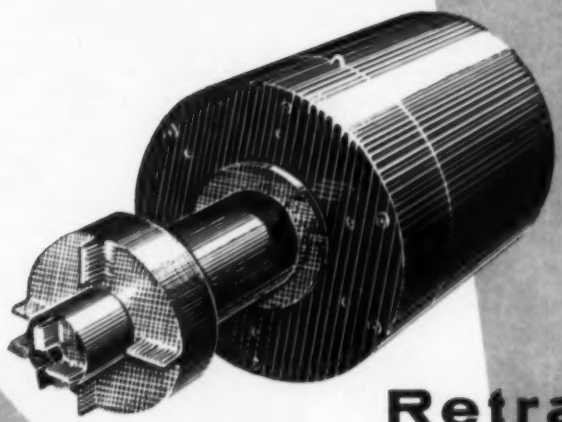
Principal Equipment

L-M double pond saw, driven by 15 hp. motor; **Eureka Boiler Works** 96x90 inch barker; **Yale** 5-ton overhead chain hoist charges **Coe** lathe, with 84 inch swing; **Coe** 113 inch knife grinder. **Redco** lathe drive; two **Elliott Bay** semi-automatic clippers; two **Phelps** burners; **Signode** strapping; two **Clark** lift trucks; one **Hyster** lift truck; **Pacific** pump for pond; **Gardner-Denver** air compressor; **Schram** compressor; **Valvair** controlled air clutches on tray system.

Half-inch strapping is used for bundling veneer with two Three lift trucks moving the veneer about the plant and loading trucks of the Johnson Trucking Co., Tillamook, Ore. Johnson trucking does the contract hauling with veneer being sold on the open market.

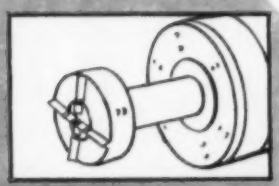
A total of 75 employes operate the plant which is managed by C. H. Tegner. Glenn Jackson is plant superintendent and James Fisher is sales manager. The principals include H. W. Cook, president and A. W. Sweet, treasurer.

another First from Jackson

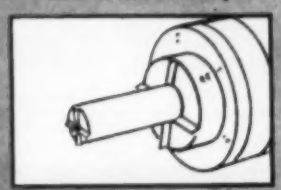


Retractable Chucking

Fully automatic retractable chucking now available on the entire Jackson lathe series means higher yield . . . increased production . . . minimum waste . . . higher profits. Jackson Models equipped with retractable chucking and back-up roll allow for maximum accuracy of peeling. Retractable chucking is available also on the Jackson Series PW Lathes. Available in all knife lengths up to 135".



This photo shows outer chuck fully extended to hold the block at start of cutting.



Outer chuck retracts automatically as diameter of block is reduced.

VENEER MACHINES DIVISION

JACKSON INDUSTRIES INCORPORATED

Birmingham, Alabama

WRITE OR WIRE FOR COMPLETE INFORMATION ON ALL JACKSON LATHES.

Exterior Production Added to Sheathing Plant

New East Side Oregon Plant Producing Fir and Larch, to Add Pine to Sheathing Plant

One of the few "east-side" plywood plants on the Pacific Coast recently expanded to include exterior production with the addition of a hot press. Jefferson Plywood Co., Madras, Ore., is now producing 3½ million square feet of sheathing a month, ⅜-inch basis. Under direction of plant manager Jerry J. Hancock, the plant is operating three spreader shifts and has a total payroll of 115.

Drawing timber from the east side of the Cascades, the plant is currently working Douglas fir, white fir and larch, but there are tentative plans for peeling and laying up Ponderosa pine from a nearby source of supply.

There are 10 acres of pond and unlimited nearby decking area on the plantsite. The main building is 240x360 feet with the green end addition 180x45 feet. Company officers include Philip Dahl, president; Robert Wilson, vice-president; Samuel S. Johnson, secretary; J. P. Andrews is office manager and O. B. Williams is sales manager.

The new plant is conventional in design and flow with logs being bucked into peeler blocks in the pond with double L-M electric chain saws. A Coe lathe feeds to a 150-foot 5-line tray system and two Coe semi-automatic clippers. The dry end uses a Williams-White hot press, Marolf cold press, Coe dryer, Globe spreaders cutoff saws.

(*Continued on page* 66)

BUCKING is handled by the double L-M electric pond saws. Pump draws sawdust from pond. Hydraulic dogs hold logs.

BARKING is done with a Nicholson overhead type barker with scraper bar. Ederer 5-ton crane services barker.

PEELING is handled with an 80x113-inch Coe lathe. Ederer charger is used. Skeen drive on the lathe.

CLIPPING is done with two Coe semi-automatic clipper in standard positioning. Seven men pull from sorting chain.

SAVE $2000 A MONTH

with the Fischer CROSS FEED Veneer Splicer

The Fischer CROSS FEED Veneer Splicer can:

Produce as Much as Four Conventional Splicers

- Even with five fewer operators and much less expensive floor space, you can get 250 feet of glue lines per minute

Cut Waste Up to 10%

- Three-inch-wide strips can be spliced **efficiently**
- Width clipping is automatic, and there is **no trim loss**

Up-Grade Stock

- Veneer is much flatter because of uniform heating of **glue lines and stock**
- **Less splitting** because of less handling and exclusive **"Walking Shoes"** feed

Increase Dryer Production

- You can splice wetter veneers because curing dries stock uniformly

Splice Face and Core Stock

- Use stock down to 1/32" thickness
- Three-width machines—70", 90", 106"

It will pay you to learn right now how this Fischer **Cross Feed** Veneer Splicer can help you increase production, lower costs, and save up to $2000 a month.

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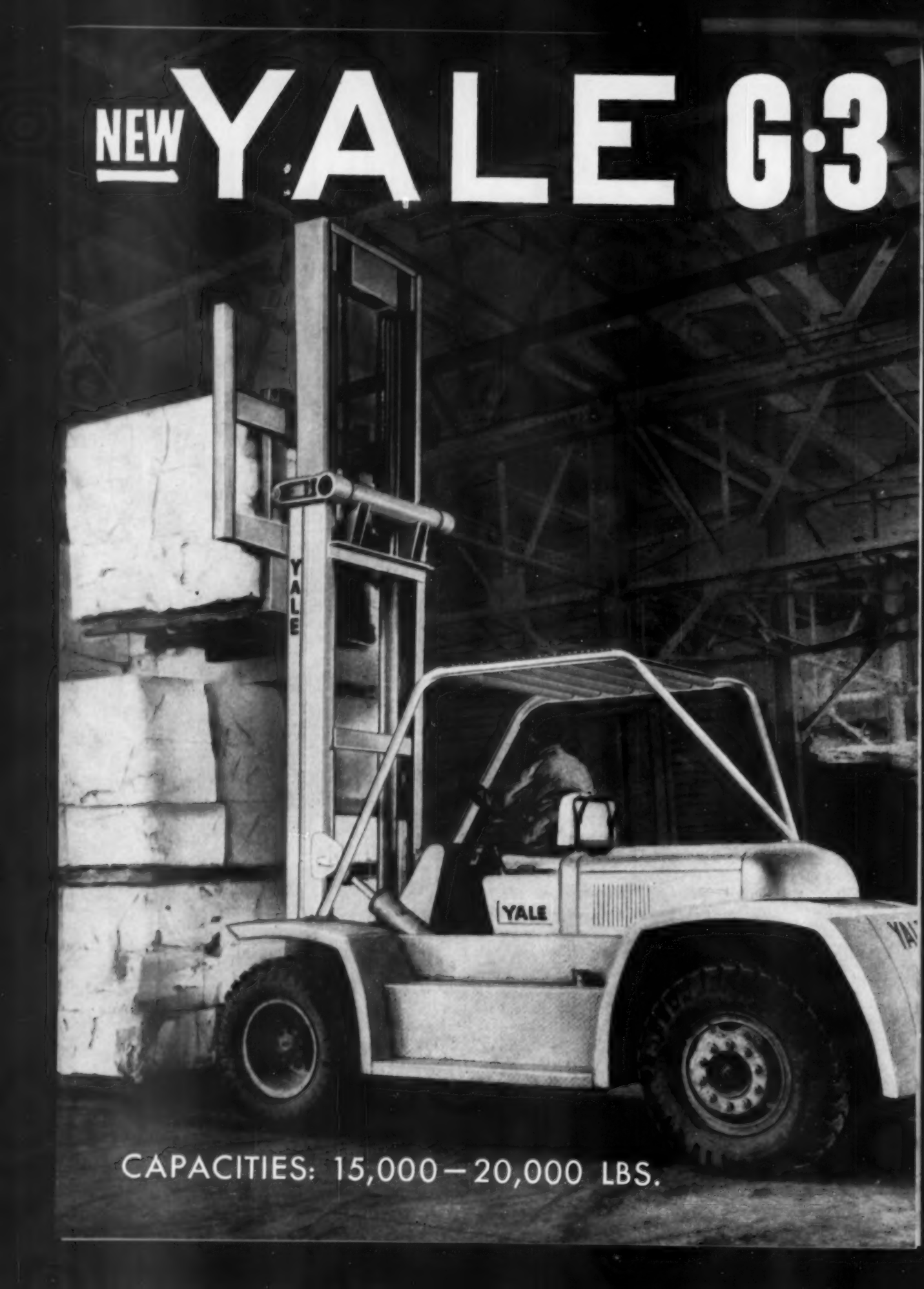
NEW YALE G-3
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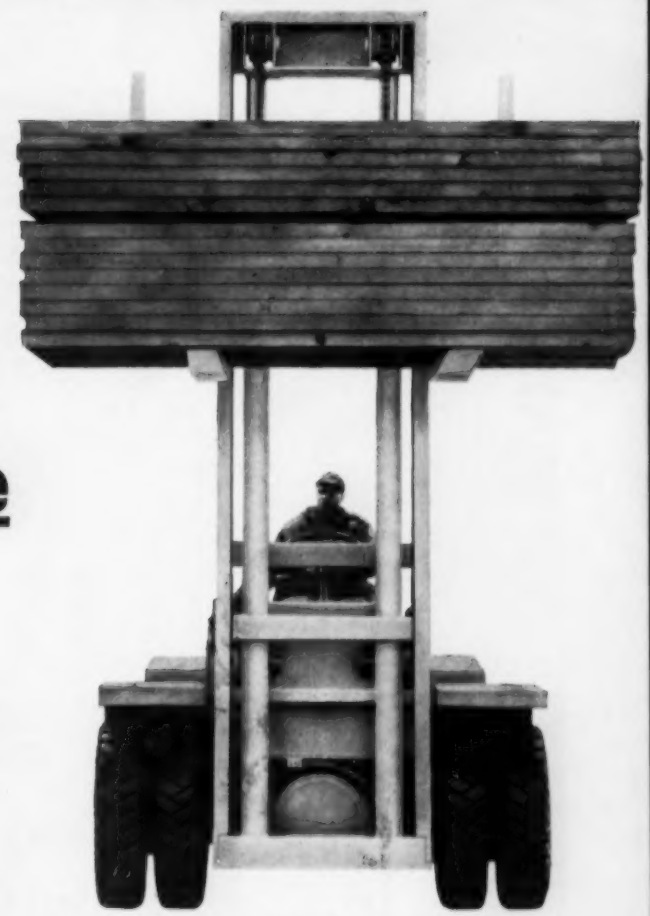
YALE
CAPACITIES: 15,000—20,000 LBS.

SERIES

the only high-capacity gas trucks with all three features you need for fast, safe handling of BIG LOADS



300% MORE VISIBILITY. "Wide-Angle Vision"—a Yale exclusive! Upright channels are wide-spaced and nested. Hoisting cylinders and lifting chains are right next to channels to reduce frontal obstruction. Fork carriage has only one top, one bottom bar for extra forward visibility at all levels of fork lift. Unique open front design plus high center position of driver provide a wide arc of vision—maximum visibility forward *and* to the rear for fast, safe handling of heavy loads.

GREATER STABILITY. You get maximum stability under capacity-load conditions—even over soft or bumpy terrain. Center of gravity is low. Underclearance is high. Large, high-flotation tires give plenty of traction. Articulated steering axle, rugged wide-spaced upright design, side-thrust rollers keep loads steady at all points of lift, minimize weaving.

EXTRA MANEUVERABILITY. Short overall length plus 75-degree steer-wheel angularity mean extra-tight turning radius —high maneuverability. Power steering helps driver to move in and out of tight areas fast. For fast cycle operations, these new Yale trucks feature lifting speeds up to 60 feet per minute... fast, controlled lowering...travel speeds up to 20 MPH.

New G-3 Series Gas Trucks Have Famous Yale Quality—Premium Engineering Features Included as Standard:

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- **For driving comfort:** Hoist, tilt, attachment and gearshift controls are grouped for easy-reach, right-hand operation. Directional control on steering column.
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- **Your choice of Fluid Coupling or standard transmission.** Gasoline or LP-Gas powered models. Wide range of attachments—all engineered for a minimum loss distance.

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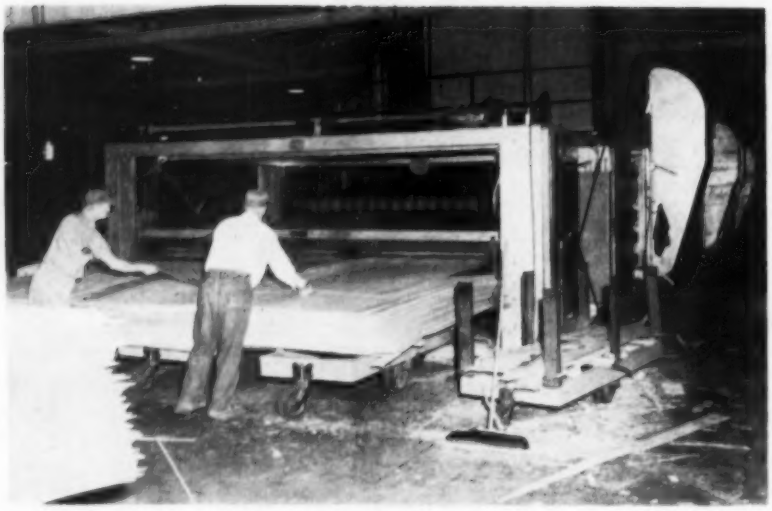
Exterior Production Added Jefferson Plywood Co.

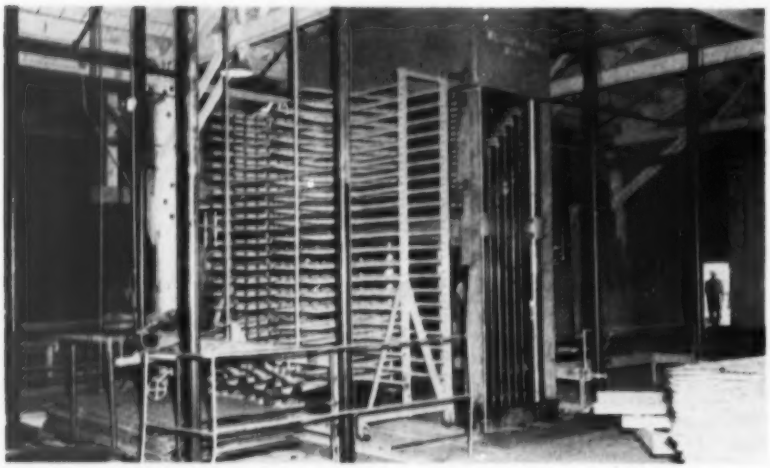
(*Continued from page 62*)

PRINCIPAL EQUIPMENT

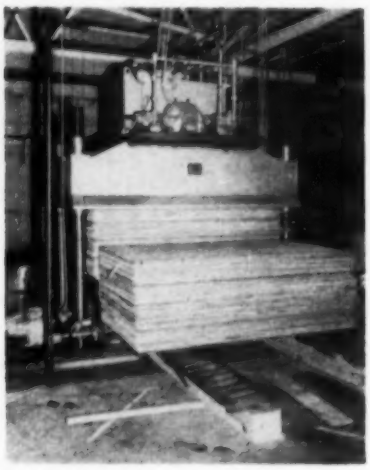
L-M double electric pond saws; **Ederer** 5-ton rail crane; **Nicholson** overhead barker; **Ederer** lathe charger; **Coe** 80x113 lathe with **Skeen** drive; Two **Coe** semi-automatic clippers; **Rader** Pneumatic chip system; **Sumner** 72-inch chipper; **Coe** oil-fired 14-section, 5-line dryer; **Raimann** patchers; **Merritt-Solem** jointer; **Mann-Russell** electronic edge gluer; **Victor** clipper; **Globe** skinner and cutoff saws; **Globe** spreaders; **Maroff** cold press; **Williams-White** 20-opening hot press; **Francis** and **Fluckinger** mixers; **Yates** 6-drum sander; **Dennis** taping machine; **Victor** belt sander; **Clark** and **Yale** forklifts.



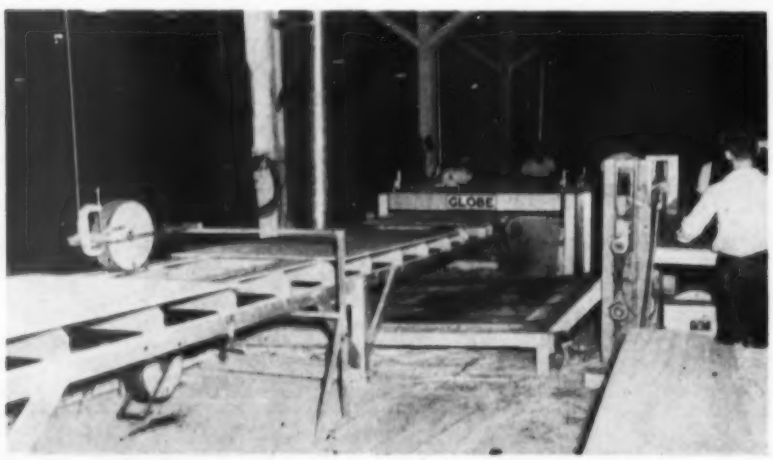
THE DRYER is a 14-section, 5-line Coe unit that is direct oil-fired. A Coe automatic feeder is handled by two men. Plant produces exterior and interior sheathing.



ADDING of exterior glue line to the sheathing production at Jefferson Plywood necessitated installation of this Williams-White 20-opening hot press and Globe spreader.



INTERIOR sheathing produced on the Maroff Cold press. Globe spreader used.



SIZING of all panels from both presses is handled by the Globe skinner and cutoff saws shown above. The dry clipper at right of photo is a Merritt-Solem unit.

CHIP production is important to operation. Sumner 72-inch chipper is used.

A Modern Veneer Plant

As a production expert mentally pictures a veneer plant he sees a factory utilizing advanced manufacturing techniques.

He visualizes the various operations as the log moves from soaking pond to shipping platform.

He sees the log quickly debarked—then moved to the * **lathe** to be speedily cut into veneer—the strips of veneer conveyed into one of the levels of the * **deck system.**

From the decks, in sequence, he pictures the sheets being cut to size on the * **clipper**—then being conveyed through the various levels of the * **dryer**—to emerge thoroughly dried and ready to be glued up into plywood or shipped to other producers.

And in a convenient corner he sees the essential * **automatic grinder** which keeps all knives in condition to assure top production.

THE COE MANUFACTURING COMPANY
PAINESVILLE, OHIO

* COE LATHE

* COE CLIPPER

* COE DRYER

* COE KNIFE GRINDER

* In the above plant as in a majority of plywood factories the basic machinery is of COE manufacture

VENEER STACK CHECKING ELIMINATED

Asphalt-reinforced paper on top of stacks solves problem at Drain Plywood Co. plant

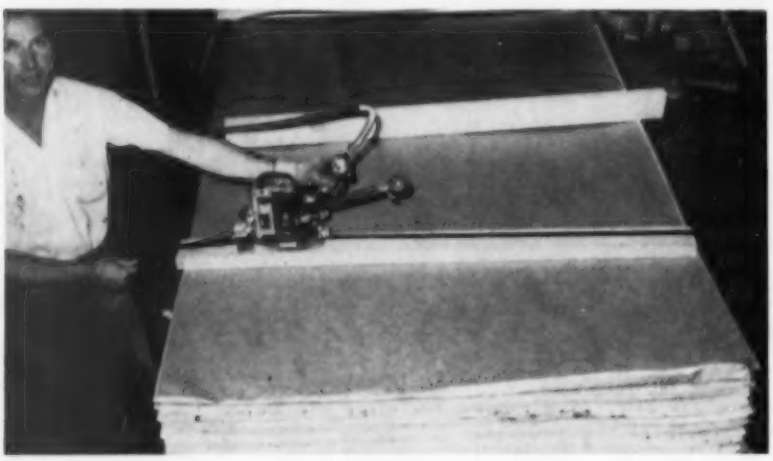
SIMPLE APPLICATION of an asphalt-reinforced, waterproof paper to the top of veneer stacks has solved the air checking problem for Drain Plywood Co. at Drain, Ore. Application is easy; the operator lays a sheet of Fibreen 200, a product of American Sisalkraft Corporation, on top of each veneer load before laying on the protective 2x4 strips, and tucks each sheet under about three inches down the load.

Then a ⅝, .020 guage Signode steel strapping is applied with an automatic air pressure Signode strapping machine and the bundle is ready for shipment.

Harold M. Buckner, plant manager at Drain, says that prior to using the Fibreen 200, air checking caused damage to the veneer by splitting the sheets approximately two inches down the load. This resulted in downgrading as much as 18 sheets of veneer with a possible loss to customers of over $200 a car, depending on how long the customer held the stock before drying.

With the use of the covering, customers have found no loss after as much as six weeks storage, Buckner says. "We have met with such good reaction to this use that we are now protecting our lower grades of veneer as well as the higher ones."

Buckner says the use of the asphalt impregnated paper is now only adaptable to retain the moisture in the bundle, but also protects from dirt in transit. He says Drain Plywood plans to continue its use when it starts plywood manufacturing.



PREPARING STACKS. Above, asphalt-reinforced paper is tucked under sheet of veener about three inches down stack at both ends. Strapping, below, uses Signode strapping applied with Signode strapping machine around protective 2 x 4 strips.

8 DFPA Representatives Picked Regionally

• The Douglas Fir Plywood Association has appointed eight new regional representatives, according to Joseph Weston, field promotion director. They are: John Wragge and Joy Yancey, New York City; Robert Godman, Washington, D. C., operating out of Philadelphia, Pa.; John McKown, Cleveland, Ohio; W. G. Harden, Atlanta, Ga.; Robert D. Morris, Dallas, Tex.; A. M. Leggett, Dallas, Tex., operating out of Memphis; and B. J. Pavlovich, Minnesota - St. Paul and Kansas City.

The new representatives recently received three-week training courses at Tacoma under the direction of Stanley A. Taylor, assistant field promotion director.

Japanese Plywood Output Increased

• Two new Japanese plywood plants have gone into production, increasing considerably the country's plywood capacity. New plants include:

• Hokushin Gohan K. K., Osaka, production capacity of 2 million square feet a month. Kichizo Kokubu is president.

• Showa Gohan Seisakusho, Nagoya, production capacity of 4 million square feet a month. Gun-ichi Iami is president.

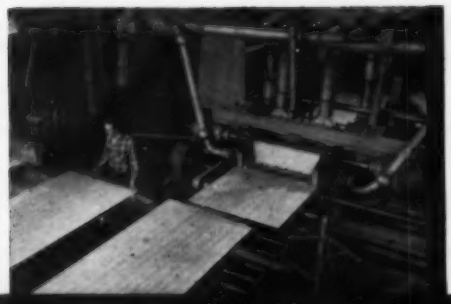
New Plywood Plant Due Medford, Ore.

• Another plywood plant is to be built at White City, near Medford, Ore. It will be a layup plant constructed by the newly organized White City Plywood Co.

The seven stockholders of the new firm headed by president Eldon McNamer, include six persons who were formerly associated with Fort Vancouver Plywood Co., Vancouver, Wash. They include McNamer who was plant manager; Henry A. Dotter who was general manager; Arvin S. Capps, G. S. Stubbs and Arlie S. Straw. The other stockholder is Paul Schultz. Dotter is expected to be general manager.

The initial plant capacity is expected to be 2.5 million square feet, ⅜-inch basis, per month. By the spring of 1958, a second drier may be added which would increase production to about 3.5 million square feet.

The new firm will buy its veneer on the open market. Plywood sales will be handled by City Wood Products, Seattle, Wash.



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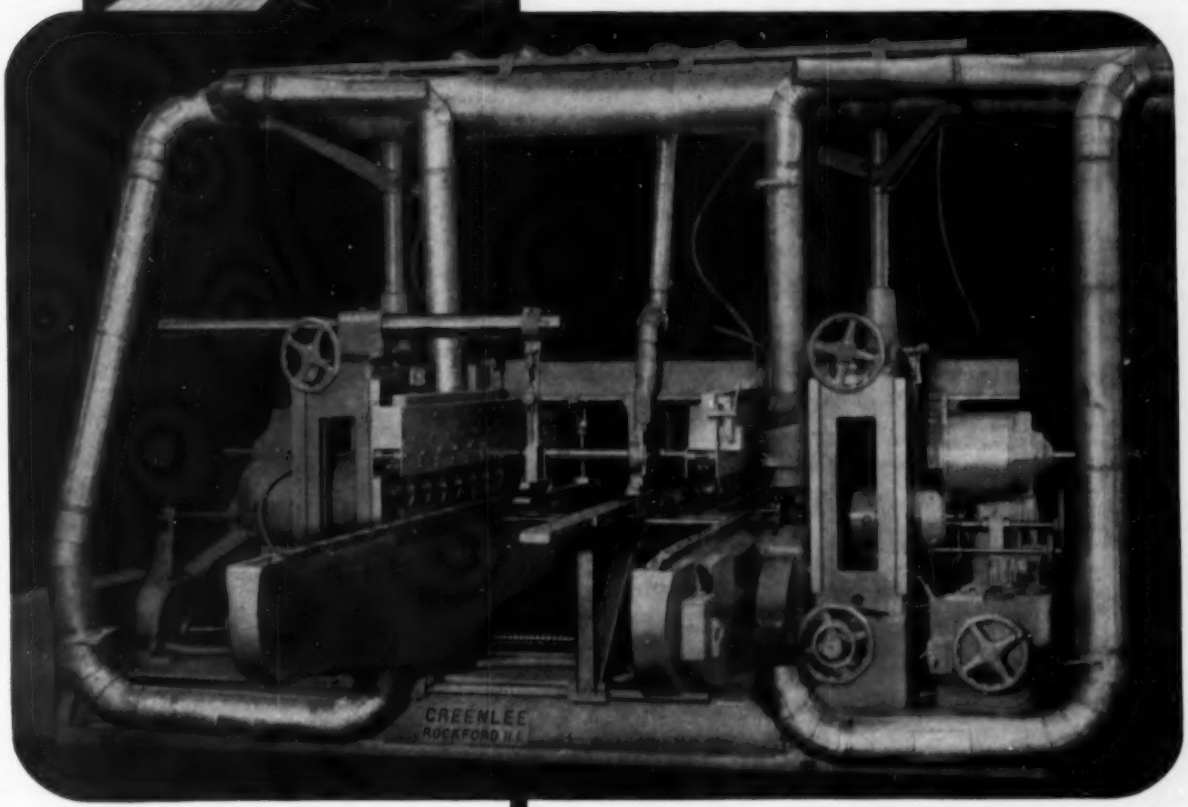
PLYWOOD SIZING AND SPLITTING



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Rubber roller hold-downs, with individual air cylinders for wheels, automatically compensate for varying panel thicknesses. You feed different thicknesses, or a number of panels, at will.

Stationary dado with overhead support handles splitting and special grooving work. V-Chains and tracks, pioneered by Greenlee, give greater cutting accuracy. Tracks machined of laminated material eliminate lubrication and wear problems. Inserted-tooth drive sprockets heat-treated for long life.

Offal reduced to shavings by machine illustrated through the use of hogging heads and removed by an engineered exhaust system.

Machine readily adaptable to automatic transfer units for moving work from skinner saw to a cutoff saw or other production units.

Here are the kind of production efficiencies many plywood producers are enjoying today with a GREENLEE No. 545 Skinner Saw on the job: *Greater production* . . . up to 110 feet per minute, running either single panels or several at the same time. *Unusual cutting accuracy* . . . square, true edges that never vary. *Fast setup time* . . . provides efficient, economical use of the machine on either short or long runs. Other advantages include minimum down time, minimum maintenance, to help you streamline and perfect the quality of your production—whether you make plywood, hardboard or chipboard. Write today for complete data.

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Particle Board Industry Enjoys World-Wide Boom

PARTICLE BOARD WAS FIRST MADE, both in the experimental stage and in commercial production, in flat presses, and the vast majority of plants operating today employ multi-platen presses. But intensive rerearches in Western Germany during the period 1947 to 1949 led to the development of the extrusion process, which speedily found commercial application. Today there are in existence or under construction about 45 plants utilizing the extrusion process in various parts of the world, including 17 in North America.

Extruded board does not possess the same strength characteristics as flat pressed board; though it can serve in a limited number of applications in a raw state, it is essentially a core material, for utilization after facings have been applied. Its importance springs from the fact that, for a given output, the capital cost of an extrusion plant is approximately half that of a multi-platen plant. This explains the rapid rise in its popularity, especially for operators anxious to convert their own or local wood residues into core material for use in subsequent operation, e. g. furniture manufacture.

Estimated World Output of Particle Board, 1950 to 1956

(000 m.³)

	1950	1951	1952	1953	1954	1955	1956
Europe	10	40	80	120	270	450	725
North America	10	15	30	80	120	180	240
Latin America					1	5	8
Africa				5	15	25	40
Far East				2	5	8	12
World	20	55	110	205	410	670	1025

Various types of flat pressed particle board are produced but three principal types may be distinguished; single-layer, two-layer, and three-layer board. The single-layer and the three-layer variety are those most commonly found and most come in the medium density range. They find use as core stock for veneer and other overlaid furniture, and as panel material with and sometimes without additional treatment after manufacture.

World production of particle board today is about one million m.³ but this figure is well below world capacity since the industry is undergoing very rapid development.

The following table gives estimated world particle board production for 1950 to 1956:

Europe today accounts for over two-thirds of all particle board produced. In no other forest product does Europe enjoy this pre-eminence.

The wide margin between current production (1,021,000m³) and expected capacity two years hence (over 2,800,000m³) is a clear indication of the rapid expansion which this industry is presently undergoing. In the space of less than a decade the particle board industry will have reached a capacity—around two million tons—which exceeds the current production of either insulation board or hard fibeboard.

CURRENT EXPANSION PLANS suggest that Europe will continue to dominate the pattern of world production, though the U. S. A. will displace Western Germany as the world's largest single producer. Practically the whole of European production is concentrated at the present time in the countries of continental western Europe, the shares of Scandinavia and eastern Europe being so far negligible. West Germany accounts today for over a third of European production and a quarter of total world output. Belgium, Denmark, East Germany, Italy, Netherlands, Switzerland and the United Kingdom—all wood-deficit countries — together account for 280,000,000 m³, another quarter of world output.

Two main factors in rapid growth of the particle board industry have been: (1) the need to find a substitute for solid wood where that has become scarce or relatively dear, and (2) the will of operators to turn to profitable account residues arising in their forest products operations.

The fifty or so plants in production or under construction in the United States are mainly concentrated in the Douglas fir region of the Pacific Coast or in the furniture manufacturing centers of the eastern seaboard and the Middle West. The highly developed sawmilling industry of the Pacific Coast gives rise to vast quantities of sawmill residues. While most of the slabs and edgings can find a ready market as pulp chips, the considerable volume of planer shavings are so far not suited for pulping.

Thus planer shavings may come to be the most important single raw material for the particle board in this area. Generally speaking, the board there produced is for the market, and with labor costs high and heavy freights involved in reaching the principal consuming centers, the tendency is towards large, highly mechanized mills to keep the product competitive.

IN THE EAST, operating costs are lower, and with markets nearer smaller mills can be economic. In any case, many of the mills there operating are captive plants making use of furniture mill residues to produce panel and core stock for use in the parent plant in the manufacture of doors, carcase furniture, etc.

So far in the United States there is little recourse to roundwood as raw material; by and large particle board production is undertaken as a means of valorizing mill residues. With adequate supplies of these still available, there is no incentive to utilize forest residuals or roundwood, both of which are more expensive.

In Europe, on the other hand, both roundwood and forest residuals are being used. The former (frequently species without a high current commercial value) permits the production of superior engineered particles for the outer layers of three-layer board, while the latter, along with the miscellaneous mill residues, is adequate for the center stock.

Both in Europe and North America, there seems to be a distinct tendency towards the employment of engineered, controlled dimension, particles, partly on the grounds that this makes it easier to control the quality of the board and determine its properties, and partly because it permits significant economies in the amounts of binder required.

Continuous Press Manufacture of Particle Board

By
W. J. FISCHBEIN

Managing Director, Vera Engineering Co., Ltd., London, W. 1

THE FIRST BARTREV PRESS, installed at Marks Tey in England, has been in operation for three years as a production unit and is the forerunner of further presses now under erection in other countries. The principle object of a continuous process is to lower the cost of production by higher output with less overheads for the relative capital and space involved.

The method employs a continuous conveyor to carry the raw material from mixer to saws and this facilitates the use of high frequency heating to bring the material to the correct condition for final compaction. Improved heating methods for the platens enable the press to run at a greater speed than has previously been possible.

Three-layer boards can be produced by the Bartrev method by relaying onto the surfaces the fines extracted from the initial material thereby enabling losses to be reduced to a minimum. The continuous nature of the board enables any lengths to be cut and eliminates end trimming during manufacture.

Preparation of raw materials is essentially similar to that used in other particle board processes. Particles are prepared for size and shape, dried to required moisture content and mixed with resin. The resin-particle mixture

in the United States

as well as

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PHILIPPINES
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Nicholson Murdie Machines
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Victoria, B.C.

Cable: Norwood, Los Angeles or Pacificwood, Tokyo

PLYWOOD PRESS EXPORTED TO U.S.A. - 500 U.S. TONS CAPACITY - HYDRAULIC PUMPING UNIT: OILGEAR PRODUCT

is laid onto a continuous stainless steel belt by the mat-laying unit, and is carried on this belt through the compactor, and high frequency zone into the press itself.

The press consists essentially of two continuous chains of heated platens each supported by ten sets of roller bearings running on ten steel rails in each of the upper and lower beds of the press. These platen chains in turn support two stainless steel bands on the lower of which the carpet has been laid. As these bands are carried through the press the profile of the rails causes them to converge gradually until the carpet is compressed to the desired thickness, and from this point they are held parallel for the remaining section of the press.

THE CONTINUOUS PROCESS has the advantage of being able to employ a continuous conveyor to carry raw material from discharge of the mixer through the various stages of mat-laying, precompacting and pre-heating right through the press itself until it emerges as fully cured board ready for automatic trimming and cutting to length.

Accurate control of weight and uniform volumetric and gravimetric distribution of the material has been introduced before it passes into the mixer from a continuous belt weighing device. Mixers discharge the resinated material, to which fast acting catalysts have been added, directly into the mat-laying and forming unit positioned over the steel belt so that hold up times are reduced to a matter of a few seconds. Signals originating from the continuous weighing device indicate changes in bulk density of the material passing into the mixer and these are used to actuate servo motors which raise or lower the height of the thickness gauging member of the mat-laying unit.

Accuracy of density is thus ensured by controlling the mat-layer volumetrically according to changes in the bulk density of the material. For this purpose the automatic mat-layer which is mounted for presettable adjustment of mat thickness is also adjustable during laying as to its spacing from the mat receiving surface according to predetected variations in bulk density of the material.

The uncompressed carpet of material thus laid evenly on the steel belt passes through a precompactor for light compression and consolidation. Several layers of material can be laid in exactly the same way by the equivalent number of mat-laying units mounted in the sequence in which they are required above the continuous belt.

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The new Slab-Log Chipper is available with 9" x 15" or 12" x18" opening. Exceptionally low anvil knife cost due to unique design affording four usable edges. Suitable for use in your saw mill, slab concentration yard, pulpwood yard, or pulp mill.

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The Particle Board Industry In Canada

By
F. W. KING

Ottawa Laboratory, Forest Products Lab. of Canada, Div. of Forestry Branch.

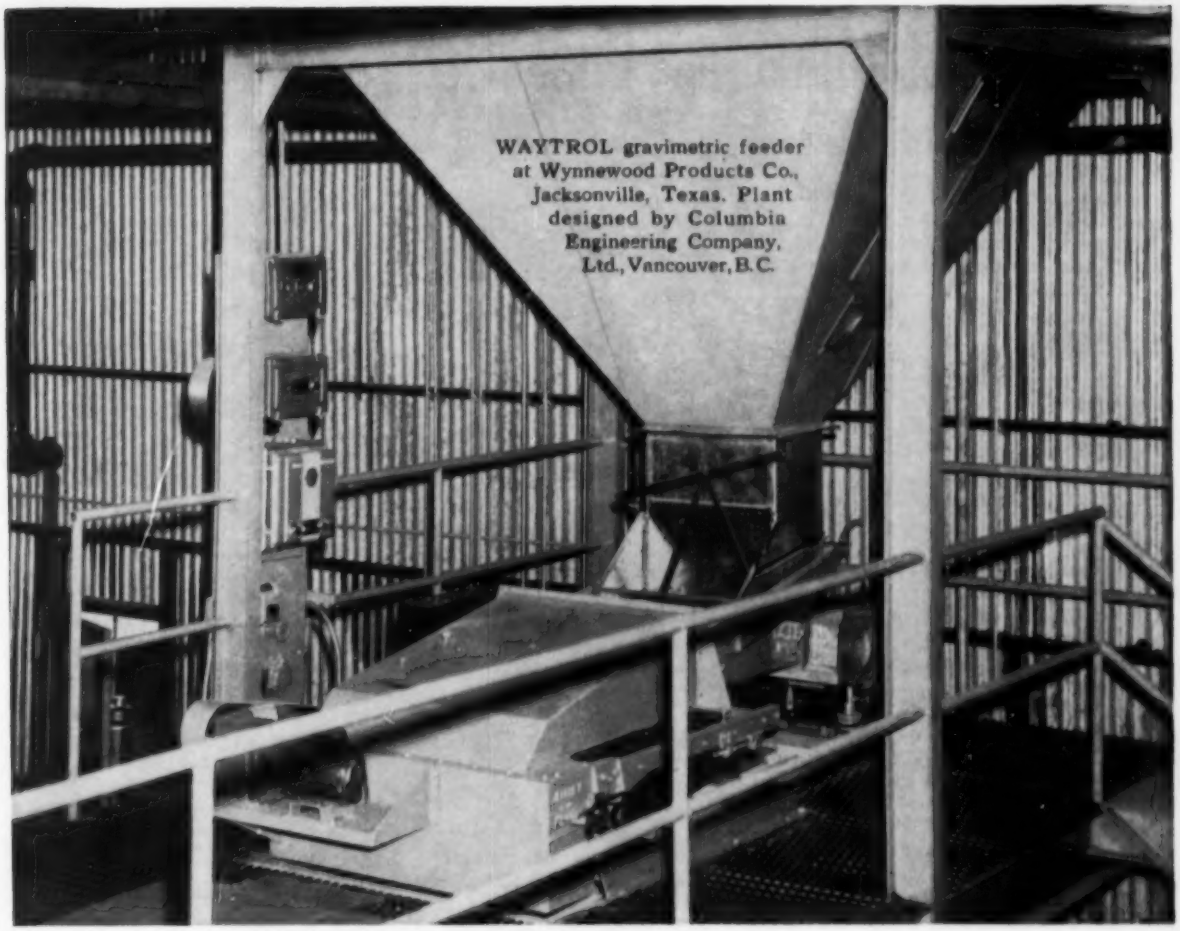
THERE ARE NOW THREE PLANTS in Canada with a capacity of 35,400 tons per year. The first was established in about 1946. The actual production estimated at about 30,000 tons per annum is lower than this since some of the mills do not operate on a full time basis, as markets have not yet been established for their entire capacity.

Two of three plants produce boards by the flat-press process and one by the extrusion process. One of the flat-press concerns makes a homogeneous particle board using splinter-like wood particles. The other makes a three layer board consisting of fine shavings for the outer surfaces and relatively coarser shavings for the core. The third plant uses an extrusion process and is capable of producing either a solid or tubular product of any length.

Round wood accounts for approximately 30 per cent of the total raw material used in the particle board manufactured. The species most commonly used are jack pine, red pine, spruce, balsam and poplar.

Slabs and edgings and other lumbering leftovers provide about 70 per cent of the raw material, the species involved being mainly white pine, red pine, spruce and balsam.

The flat-pressed particle boards and the solid extrusion boards are made in thicknesses ranging from 3/8 inch to 1 inch and are widely used as tile or linoleum floor underlayment.



WAYTROL gravimetric feeder at Wynnewood Products Co., Jacksonville, Texas. Plant designed by Columbia Engineering Company, Ltd., Vancouver, B.C.

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eliminates measure-and-mix batch system

Assures uniformity in high density core board

From the surge bin, the WAYTROL automatically meters pre-set quantities of pine shavings to the mixers. There they are first blended with hot sizing to make them water resistant, then with resin.

No operator in attendance here as with a batch system, so there's that saving. The continuous method of feeding shavings assures a high degree of uniformity, making Wynnewood particle board a finer product.

The Jeffrey WAYTROL is a precision machine, built for constant service. Its "electric brain" responds instantly to the weigh-belt which controls the rate at which materials feed to a process. For more detailed data, send for Bulletin 841. The Jeffrey Manufacturing Company, 850 North Fourth Street, Columbus 16, Ohio.

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Maritime Conditions Unsettled

By **ROBERT C. HILL**

Unfavorable conditions continue to dominate the shipping picture. As the usual dull summer period draws to a close, maritime observers see nothing to indicate an upturn either in the amount of cargo available or in ocean freights.

It is a era of famine following three years of exceptional high rates in all directions. Compared to late 1956, ocean freights are less than half those prevailing at that time.

The situation is more acute in the Pacific than on the Atlantic side. Here, there is a large fleet of ships, returning from voyages to the Far East, seeking cargoes. Many of them are in distress, willing to accept whatever is offering, their owners anxious to get them back to the East Coast in the hope of better business there. Unless conditions improve in the immediate future, extensive withdrawals may be expected and many additions made to the idle fleet, both American and foreign flag. Several ships have been placed in reserve in the Columbia river recently.

Much of the surplus grain, stored for many months in the Pacific Northwesty, has been moved and the prospects for the coming crop export season are unpromising. Some wheat is still being booked for India but in limited volume and at distress rates.

Negotiations are currently under way between the United States and Japan for a $175 million loan to finance the purchase of grain and other commodities in this country.

Scrap, which for months has been active factor in the charter market, is also in the doldrums because of the shortage of Japanese funds.

During the last thirty days, British Columbia exporters have closed several cargoes of lumber. On the American side, shippers report foreign trade extremely slow and confined to parcel shipments. Two full lumber cargoes for South Africa discharge, October and December loading, are reported for British Columbia loading at $152,500 and $144,000 respectively. A year ago similar business was $300,000 or more. An October cargo for Australia was closed at $120,000, lumpsum, free load and discharge. This figure is also in line with current depressed levels. Lumber from British Columbia to United Kingdom was closed at $13 per M. feet, while a full cargo for Haifa is reported at $140,000. The first intercoastal lumber cargo in several months, British Columbia to north of Hatteras, was done at $128,000.

It is interesting to note that effective Sept. 9, the conference intercoastal lumber rate will advance from $33 per M. feet base, to $36. This increase is to compensate for the competitive higher trans-continental rail rates, which applied Aug. 26. Veterans in this trade recall that less than 20 years ago, lumber was freighted coast to coast at $8 or less when conditions were at their worst. The advance in this commodity, while contrary to the general charter market trend, is based on a domestic situation that is peculiar to this trade. Berth lines are not much interested in carrying lumber as they state even the higher rate level is not attractive in view of the low production of waterfront workers. On the other hand, the higher berth lumber rate will undoubtedly stimulate the chartering of foreign ships from British Columbia to North of Hatteras, particularly if the East Coast lumber market revives.

As the aftermath of this country's remarkable output of new tonnage in World War II, the United States leads the world in total gross tonnage, having 22.47% of the total, according to Lloyd's. The same source reports the world's shipping tonnage is 105,200,261 gross tons. Britain follows America with 18.58%, Norway next with 7.64%, then Liberia 5.31, Italy 3.99, Japan 3.87, France 3.75, Panama 3.73, West Germany 3.05, the Netherlands 3.81, Russia 2.51.

Lloyd's figures show that Japan last year led in ship launchings and export shipping tonnage, and adds:

"Since the end of World War II, the pattern of world shipbuilding has slowly changed. Japan and Germany have emerged as serious challengers to the supremacy of the United Kingdom whose output has previously been surpassed only by the United States and then only under war conditions."

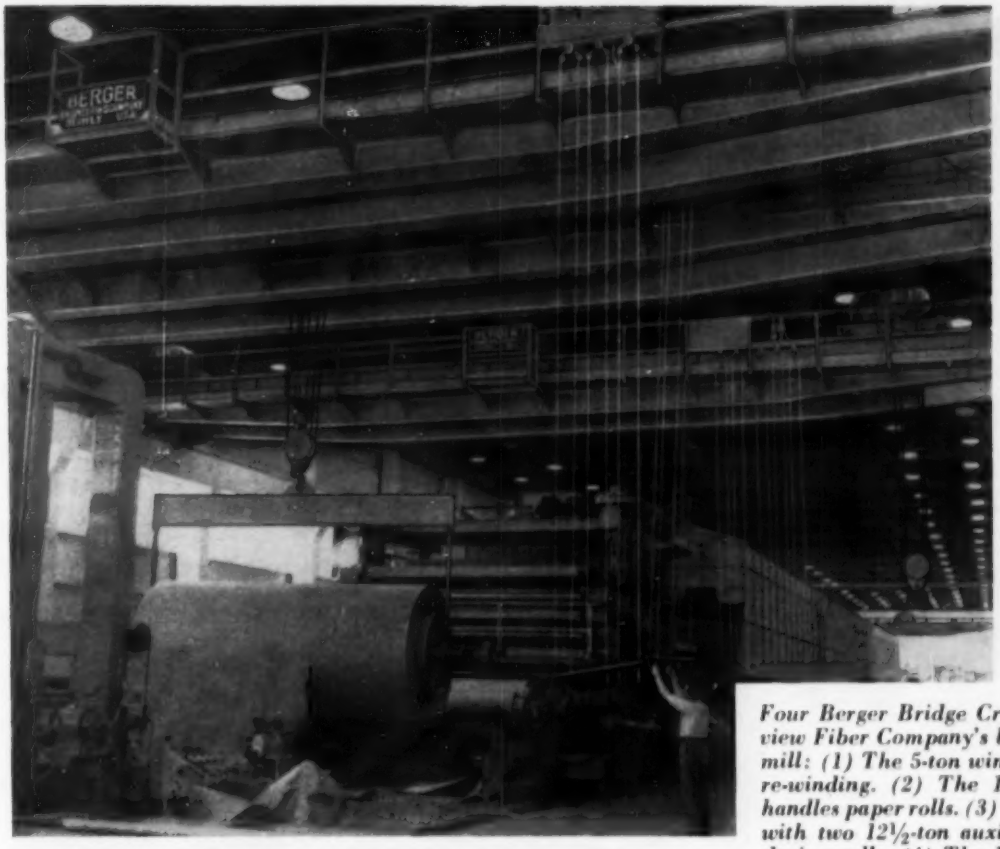
The report adds that the 1956 total of world launchings exceeded the previous year by 1.25 million gross tons, the largest increase in the post war period, adding: "But four-fifths of this increase must be credited to Japan and the remainder to Germany, Italy, The Netherlands, Norway, Spain and Yugoslavia. Of the traditional shipbuilding countries, only the United Kingdom and Sweden show declines."

The decline of the American merchant marine, in the face of extremely keen competition from foreign flags, is shown in figures of the Department of Commerce. These indicate that the proportion of this country's foreign waterborne commerce carried in United States vessels has dropped to 22%, the lowest level since the last war. In 196, American-flag ships carried 60% of this country's foreign trade. This dropped to 39% in 1950, rose to 40% in 1951 and since then has steadily waned, 23% in 1955 and only 22% in 1956.

• Fire has destroyed the Siskiyou Planing mill south of Yreka, Calif., with the loss set at $50,000. No decision has been made on rebuilding.

Inspection Tour in Philippines Previews Mills

PICTURE TAKEN DURING recent inspection tour of Mr. A. de las Alas, President of Philippine Lumber Producers' Association, of lumber mills and concessions in Mindanao belonging to members of Association. He made stop over at the Iligan Lumber Company, Inc. and saw extensive logging and lumber operatoin of company. In picture from left to right are: F. Andrada; F. Tamesis, former Director of the Bureau of Forestry; G. Lluch, manager; A. de las Alas; B. B. Andrada; J. R. Adeva; and T. Lluch.



1 2 3 4

Four Berger Bridge Cranes serve Longview Fiber Company's big, ultra-modern mill: (1) The 5-ton winder crane speeds re-winding. (2) The 15-ton reel crane handles paper rolls. (3) The 25-ton crane, with two 12½-ton auxiliary hoists, lifts drying rolls. (4) The 10-ton crane services the equipment which "fourdriniers" fibers into pulp. (Right, rear.)

FOUR BERGER BRIDGE CRANES INSURE DEPENDABILITY . . .

AROUND THE CLOCK . . . 363 DAYS A YEAR
in one of the West's biggest kraft mills

Longview Fibre's headquarters pulp, paper and board mill at Longview, Wash., is an important kraft producer and a pioneer user of forest residues in the Columbia River Basin. You see Longfibre's celebrated slogan, "Chips From Waste," on semi-trailers bringing chips from wood-product mills within a 200-mile radius. Around 800 railcars and "outside" truck-trailers also bring in chips. Handled by marvelous unloading, storing, and conveying equipment, this wood goes in as chips and comes out as pulp, paper, or board. Operating around the clock, **363 days a year,** Longfibre finds dependability imperative. Besides insuring dependability, **BERGER** Bridge Cranes speed output, simplify maintenance, and increase safety. They typify the Berger installations in pulp mills, lumber mills, steel mills and warehouses, truck repair houses and the like throughout Washington, Oregon and British Columbia.

BERGER CRANES are custom-built to do their job—in the fastest, safest, most economical way . . They have both staying power and producing power . . The same designing, engineering and construction skills that have made Berger "the greatest name in logging machinery" go into the producing and installing of Berger Bridge Cranes . . To meet YOUR specifications, Berger facilities are AT YOUR SERVICE ANY TIME.

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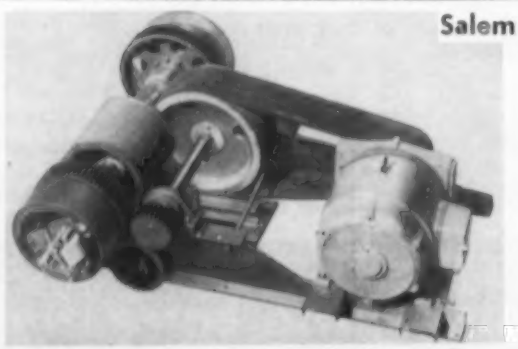
STOCKS	Paid 1956	This Month Bid	This Month Ask	Last Month Bid	Last Month Ask
Ambassador Oil Com.	$	6	6⅜	6¼	7
American Forest Products Com.	1.00 &S	24	26	24	26
Anderson Tully Co., Capital Stock	40.00	300	OW	300	OW
Atlas Plywood Com.	.15	6⅜	C	6⅞C	
Atlas Plywood $1.25 Pfd.	1.25	11	12	12¼	13¼
Biles-Coleman Lbr. Co. Com.	*	18	OW	18	OW
Boise Cascade Corporation, Com.	.50	18	20	19	OW
Booth-Kelly Lumber Co., Com.	35.00	675	OW	675	OW
George E. Breece Lbr. Com.	*	2½	OW	2½	OW
British Columbia Forest Prod., Com.	.50	10⅞	C	11½C	
Brooks-Scanlon, Inc. Com.	2.00	46	OW	46	OW
Calaveras Land & Timber Co., Com.	2.50	20	22	21	22
Calcasieu Paper Co., Com.		25	OW		
Cascades Plywood Co., Com.	2.00	24	25½	24½	26½
Central Coal & Coke Co., Com.	1.25	31	33	31	34
Cherry River Boom & Lbr., Com.	2.50	34	37	34	37
Chicago Mill & Lbr. Co., Com.	1.25	24	25½	25½	27
Cloquet Lumber Co., Com.	*	1	OW	1	OW
Consolidated Naval Stores, Cap. Stock	20.50	560	OW	225	OW
Clover Valley Lbr. Co., Com.	20.00	225	OW	560	OW
Container Corp., Com.	2.50	18½	C	19⅛C	
Container Corp. 4% Pfd.	4.00	85	C	86C	
Crossett Company, Class "A"	.55	30½	32½	31	33
Crossett Company, Class "B"	.55	30	32	30½	32½
Crown Zellerbach, Com.	1.00	49¼	C	54⅞C	
Crown Zellerbach, $4.20 Pfd.	4.20	89½	C	89C	
Curtis Companies, Com.	.40	7½	8½	7½	8½
Dierks Forest, Inc.	*	110	OW	110	OW
Edward Hines Lumber Co., Com.	3.00	37½	40	38½	41
Evans Products Co.		17¾C			
Fordyce Lumber Co., Cap. Stock	1.25	41	OW	41	OW
General Plywood, Com.		14⅛	C	13⅜C	
General Plywood, Conv. Pfd.	1.00	42	C	40C	
Georgia-Pacific Co., Com.	1.40 &S	31⅞	C	34⅜C	
Harbor Plywood, Com.	.45	11¼	C	12C	
Hardwood Tbr. Liq. Tr.	21.27	400	OW	400	OW
Holmes Eureka Lbr., Com.	.10	2¾	3¼	2¾	3¼
Insular Lumber Co., Com.	1.75	16	OW	16	OW
International Paper, Com.	3.00 &S	95½	C	106C	
International Paper, $4 Pfd.	4.00	81	C	85½C	
Keyes Fibre Co., Com.	1.20	18½	19½	20½	21½
Kirby Lumber Corp., Com.	1.00	45	49	59	62
Longview Fibre Co., Com.	2.50	59	62	61	64
Louisiana Central Oil & Gas, Com.	*	50	OW	50	OW
Louisiana Long Leaf Lumber Co.	*	70	OW	70	OW
Louisiana Sawmill Co., Com.	*	½	OW	½	OW
MacMillian & Bloedel, "B", Com.	1.00	27	C	29¾	C
McCloud River Lumber Co., Com.	4.75	78	88	65	OW
McCloud River Railroad, Com.	1.00	30	35	30	35
Meadow River Lumber Co., Com.	*	195	OW	195	OW
Medford Corp., Com.	7.00	168	178	165	175
Mississippi Land Co., Cap. Stock	2.30	13	OW	13	OW
Northwest Paper Co., Com.	2.00	28	31	30	33
O. & N. Lumber Co., Cap. Stock	2.00	45	OW	45	OW
Olin Oil & Gas, Com.	2.00	18½	20	22¾	24
Ozan Lumber Co., Com.	*	95	OW	95	OW
Pacific Lumber Co., Cap. Stock	12.00	250	OW	250	270
Pickering Lumber Co., Com.	.95	9⅝	10⅝	9⅝	10⅝
Pine Tree Manufacturing Co., Com.	3.00	85	OW	85	OW
Plywood, Inc., Com.		2	3	2⅛	2⅝
Pope & Talbot, Inc., Com.	1.35	24½	26½	28½	31½
Pope & Talbot, Inc., Pfd.	.30	4⅜	5⅜	4⅜	5⅜
Potlach Forests, Com.	1.75	80	90	90	100
Powell River Co., Ltd., Com.	1.80	38	40	40½	42½
Puget Sound Pulp & Timber Co., Com.	1.26	15¼	C	16C	
Richmond Cedar Mfg., Com.		¾	1¼	¾	1¼
Richmond Cedar Works, Com.		2	3	2½	3½
Ritter, W. M., Lumber Co., Com.	*	49	53	49	53
Rock Island Millwork Co., Com.	.25	25	OW	25	OW
Roddis Plywood, Com.	.60	15¼	16¼	13½	15
Southern Minerals Corp., Com.	*	4	5	4	5
Southwest Lumber Mills, Com.	.45	8¼	9¼	9	10
Tremont Lumber, Com.	1.00	65	OW	65	OW
U. S. Plywood, Com.	2.20	30¾	C	33¾C	
Union Lumber Co., Com.	1.25	48	52	52	56
United States Lumber, Com.	.40	4¼	5¼	4½	5½
Upson Company, Com.	1.20	14¼	15¼	15½	16½
West Side Lumber Co., Com.	20.00	170	OW	170	OW
Weyerhaeuser Timber, Com.	1.00	36½	38	40½	43½
Winton Lumber, Com. (Split 12-for-1)	*	15	OW	15	OW
Wood Conversion Co., Com.	.40	14	15	14½	15½
Wooduso, Inc., Com.		⅜	⅝	20	30

BONDS

Georgia-Pacific Plywood, Sub. Deb. 5s—1976					

*Information not available BW—Bids Wanted S—Stock
OW—Offerings Wanted C—Last sale on Exchange where listed or bid

THE ABOVE INFORMATION, WHILE NOT GUARANTEED, IS OBTAINED FROM SOURCES WE BELIEVE TO BE RELIABLE



There's a motor or arbor-drive model to fit your mill.

Salem Feed Works — *with improved braking action.*

New developments in the SALEM feed:

1. Various sized brake cylinders, internal or external, to fit your particular need.
2. Design changes reducing maintenance cost.
3. New type lining for even smoother operation.

COME IN AND SEE OUR FEED WORKS ON DISPLAY or write for full particulars.

Salem Equipment & Supply Co.

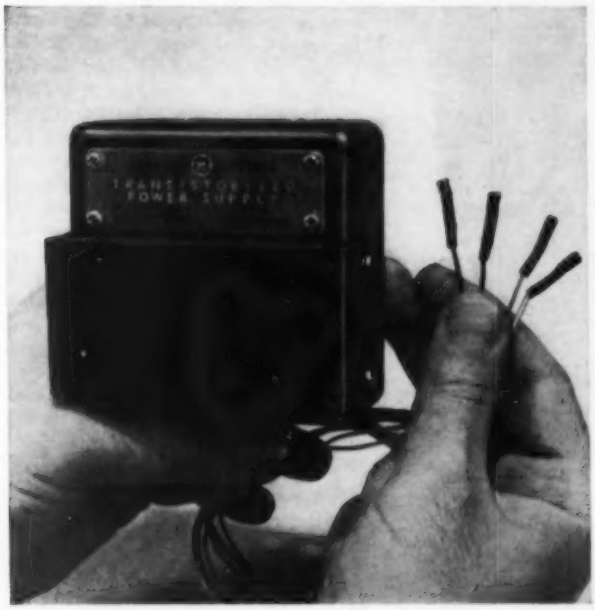
Earl R. Hitchman, Pres.

3455 D Street • Salem, Oregon

PHONE EMpire 4-4737

General Electric announces

New transistorized power supply for two-way radio



General Electric now brings you the vastly improved reliability of transistors — *without obsoleting your present equipment!*

The all-new General Electric Transistorized Power Supply—part of G.E.'s advanced Progress Line—replaces the receiver portion of the mobile power supply and eliminates the receiver vibrator.

Here's what this means: Previously you had to replace receiver vibrators several times a year. Our surveys indicate each replacement costs you from $10 to $18, depending upon service call mileage. Now you can install a power supply costing only $54.50 (when installed in new equipment at the factory, just $44.50) which has the same life expectancy as your entire mobile combination. *The new G-E Transistorized Power Supply will easily pay for itself the first year or two on vibrator replacements and service calls!*

Easy to install—Three mounting studs fasten the new unit to the front of your case or inside the older, two-unit design equipment. Electrical connections are simple: only four leads to attach.

Eliminates "Vibrator Hash" — All traces of the "vibrator hash" which interferes with clear reception are gone for good.

Easily added to any 12-volt system — The new power supply can be used with all standard makes of two-way equipment which operate from an ordinary 12-volt power source.

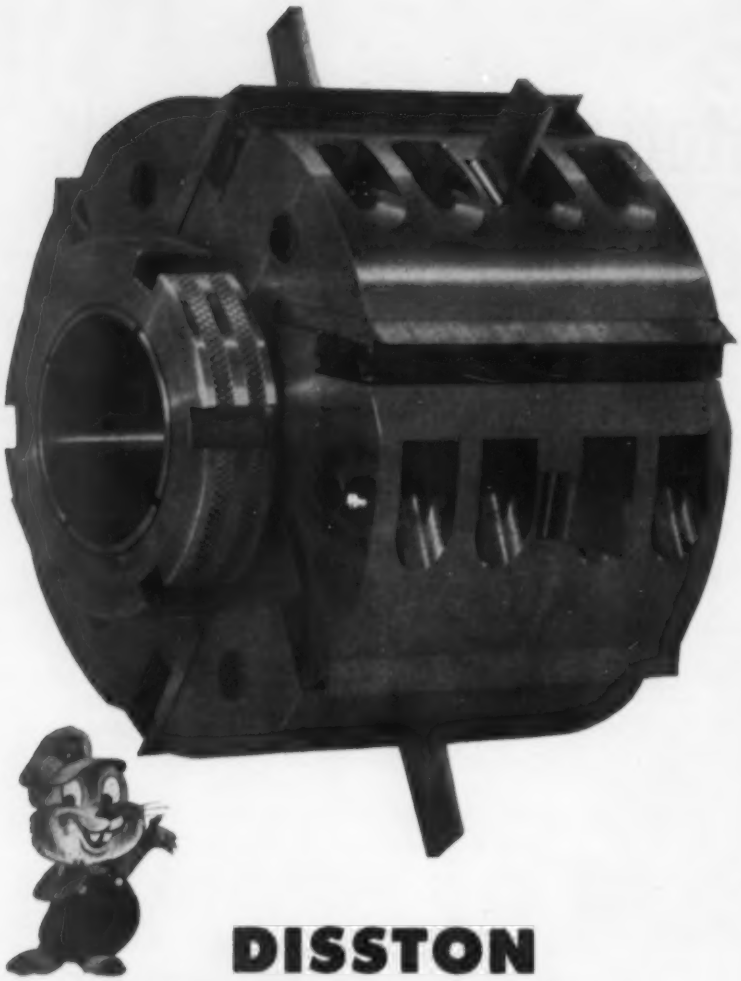
Saves you money when drivers forget—When drivers neglect to turn off their radios before starting a vehicle, the new transistorized power supply cannot be damaged.

Progress without obsolescence — The addition of the new unit to your present mobiles, no matter what make, improves performance, reduces maintenance cost, and adds to the life of your equipment. *There is absolutely no need to buy complete new mobile units to enjoy the advantages of transistors.*

See for yourself how much you save—buy a new unit or several units and try them in your own 12-volt mobile units. Call your G-E communications consultant, listed under "Radio Communication Equipment" in the Yellow Pages. Or order direct by writing General Electric Co., Communication Products Dept., Syracuse, N. Y.

Progress Is Our Most Important Product

GENERAL ELECTRIC



DISSTON CUTTER HEAD

surfaces and splits 1" lumber

in one operation

The splitters in the specially-designed Disston Cutter Head shown here are clamped against a ground surface.

The head is made of two pieces permanently assembled after the splitter pockets have been machined.

Disston's exclusive manufacturing method makes it possible to grind in one plane the surface against which the splitters are clamped, eliminating the necessity of adjusting the splitters for alignments.

If you'd like more information about Disston Cutter Heads, see your Disston distributor today.

GOT A CUTTER HEAD PROBLEM? We'll be happy to supply you with any information you need on the application of Disston Generated Type Cutter Heads to your specific problem.

Write: *Henry Disston Division*
H. K. Porter Company, Inc.
Philadelphia 35, Pa.

H. K. PORTER COMPANY, INC.
Henry DISSTON DIVISION

Tacoma Lumbermen's Club Annual Golf Tournament

• One hundred and eighty-six golfers competed in the Tacoma Lumbermen's Club 34th annual golf tournament, held at the Tacoma Country & Golf Club July 26. George Earnest of the Karlen-Davis Lumber Co., Tacoma, with a 70 over the par 72 layout won the Corydon Wagner Perpetual Trophy for low gross.

Other close finishers were Carl Larson of Port Angeles, 73, Les Carlson, Aberdeen, with a 74 and Elmer Button of Port Angeles with 75.

This golf tournament is one of two major events sponsored by the Tacoma Lumbermen's Club that attracts lumber people from all over the Pacific Northwest. Bill Garnett, sales manager for St. Paul & Tacoma Lumber Co., was general chairman for the day's activities, which also included lunch and dinner. Total attendance was 208. Host was Alan Ogren, Coast Sash & Door Co., club president. Nationally known golf pro Chuck Congdon was in charge of the tournament.

In team play, Tacoma No. 1 and Port Angeles bested teams from Seattle, Grays Harbor, Everett, Chehalis and Tacoma No. 2 team, and faced each other in the finals, with Tacoma No. 1 emerging a 1-up victor. Teams competed under rules of the Scotch foursomes.

U.S. Ply Adds Chipper, Barker at Roseburg

• Chipper and barker installation are now operating at the Roseburg, Ore., division of U. S. Plywood Corp. This utilization installation is the initial one in a series of developments planned in the Roseburg area.

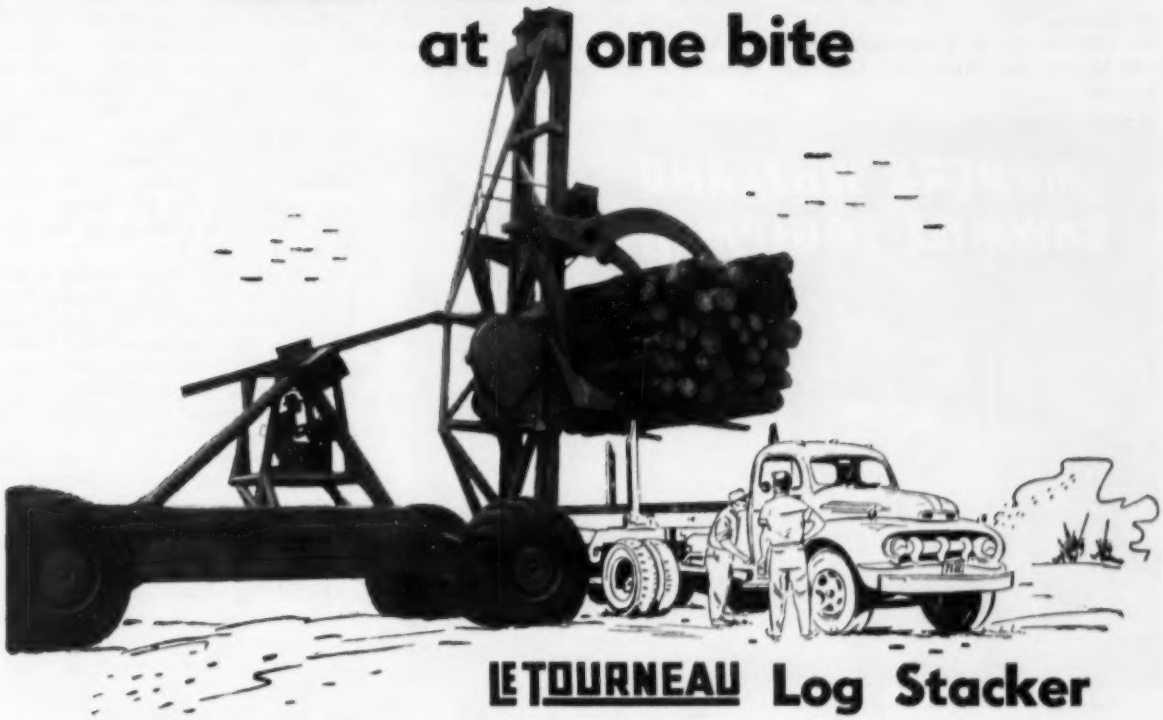
Construction is underway on a plywood plant, due for completion early in 1958. It will be a completely modern plant with many automation and semi-automatic features. Pre-steaming of block and special treatment to upgrade panels are planned.

Future plans also call for a particle board plant at the installation.

• Plywood Fabricators, Inc., has been established in Mendocino County, California, by Edward, Rolf and Trygve Stolesen.

• Southwood Corporation, Fort Worth, Tex., has placed in operation another plant for the production of Amerwood, a prefinished paneling. Amerwood is a ¾-inch pine and comes in five decorator colors. Since being introduced in 1948, production of the panel has increased from 300,000 to 3 million feet.

25 TONS at one bite



LETOURNEAU Log Stacker

handles heavy loads on-the-run . . . saves 60¢ to $1.12 per BFM

The LeTourneau Log Stacker off-loads entire truckloads in one bite, sorts logs, builds decks, feeds the mill or pond — handles all mobile lifting jobs in the yard. One man and one machine do the same mill jobs that used to keep several machines and their crews busy.

Working everything from giant redwood to pulpwood logs, this powerful machine has proved repeatedly that it will **cut handling costs in half** for most mills, saving 60¢ to $1.12 on every thousand board feet handled. The reason: 25-ton capacity combined with precise control of grip, lift, and travel . . . so that the Stacker works fast, but with utmost safety.

The LeTourneau system of electric power and control gives you the mobile power to keep your mill humming. Electric motors in each wheel drive constantly — **change speed or power without disengaging gears** — to carry up to 25 tons across rutted or muddy yards. Still other motors and gear reductions drive **directly** every powered component: forks, tusks, mast tilt, and steering. All get their energy from a diesel-driven generating plant right on the stacker.

How can you use this "mobile powerhouse" to put more dollars into **profit** instead of into machines and manpower? The coupon below will get you complete information without obligation.

LET
LETOURNEAU EQUIPMENT

R.G. LETOURNEAU INC
Logging Equipment Division

R. G. LeTourneau, Inc.
2549 S. MacArthur, Longview, Texas

Please send me additional information about the Electric Log Stacker and the name of my nearest distributor.

Name_____ Title_____

Company_____

Address_____

City_____ State/Prov./Country_____

L-143

LESS PRODUCE CUTS BOX SHIPMENTS

SHIPMENTS of boxes and box shook by members of the Pacific Division, National Wooden Box Assn. are down from last year because of 5,000 fewer cars of cantaloupe and 2,000 fewer cars of celery, lettuce and other commodities shipped this year, division president Seth G. Beach, S. G. Beach Box & Lumber Co., Placerville, Calif., reported to 60 division members at the summer meeting July 17-18 at Fresno, Calif. Beach said the decrease in members' shipments was not the result of inroads by competitive containers, that the division is holding its own.

The group took cognizance of current shipments and evaluation of four new experimental containers. Eric Engstrom, Sacramento Box & Lumber Co., chairman of the grading rules and specifications committee listed the new containers as an improved cantaloupe crate, a tray pack peach box, a super celery crate and a new nailed plum crate.

Announcement of the retirement of Edgar D. Young, the division's grade inspector, as of July 31, was made by secretary C. O. Thompson. Young's successor is Jack H. Wilson, who has had 25 years' experience in the industry and formerly was with the Stockton Box Co. at Diamond Springs, Calif.

A review of the Division's advertising program and its research program stressed the necessity for keeping a steady flow of information to consumers. A display board mounted with ads, tear sheets and clippings of material published by competitive container manufacturers afforded the delegates an opportunity to compare these with their own publications.

Another board, containing letters from nearly all states and from a number of foreign countries, attested the wide interest in NWBA containers. The inquiries resulted from release of three recent publications. E. Gorton Covington, Pac-Div publicity and advertising director, reported early scheduled completion of a new NWBA movie. Among recent agencies requesting the Division's two films now in circulation was the Netherlands Embassy.

C. D. Hudson, executive vice president of the National Wooden Box Assn., Washington, D. C., explained the place that the association holds, between NWBA members and consumers. He said that the association can do just so much in promoting the product and providing data. It is up to the members to pick up the ball and immediately provide interested parties with prices, delivery schedules and other information on which they base purchases. Particularly is this important at meetings where representatives of competitive containers are eagerly presenting their products.

In reporting on several meetings which he attended in the East, Hudson cited case examples of decided preference for the Western containers and the L. A. lug. He said, ". . . one of the speakers was a top-notch salesman for your Western containers, though he is a mid-Westerner."

Beach set February 19-20, 1958 as the dates for the division's annual meeting. It will be held at San Francisco. The dates, somewhat later than in past years, were set so that conflict with other meetings of interest to NWBA members would be lessened Mr. Beach said.

The Fresno meeting included a tour of plants in the Fresno area.

One man runs this Air Operated Wheland Carriage at Tilghman Lbr. Co., Sellers, S. C. Also shown: Wheland 6' Band Mill, Log Stop & Loader, Full Oscillating Nigger.

". . . high production of well manufactured lumber."
—Horace L. Tilghman, Jr.
Gen. Mgr. & Partner

". . . best money can buy . . . recommend to anyone."
—Henry J. Skipper
Plant Superintendent

When Management and Production agree . . . there's no doubt about it! Efficient Wheland Equipment produces quality lumber faster with fewer men. Simple, trouble-free construction. Easy handling. Electrically driven, air operated. Pays for itself from extra profits. Check the many advantages of items you need for your mill!

BULLETINS ON REQUEST

THE WHELAND COMPANY
CHATTANOOGA, TENNESSEE—PHONE AMherst 5-3181
MANUFACTURERS OF COMPLETE SAWMILLS AND AUXILIARY MACHINERY

Zalaha in Sales Post

• J. C. Zalaha has been named general sales manager of Hampton Sales Co., Portland, Oregon, according to John C. Hampton. He will operate a general wholesale business from headquarters in Portland, Ore., and will direct the sale of company production from its mills in California, Oregon and British Columbia, B. C.

ENTHUSIASTIC ABOUT THEIR Peterbilts

Shown below is one of four PETERBILTS, owned and operated by Idaco Lumber Co., of Healdsburg, California, shown backing in on a building jobsite to drop a load of pre-cut framing lumber. "We are very enthusiastic about our Peterbilts," says Evan Jeffreys, Idaco General Manager, "for their power and because they are easily maneuverable. We have to get that lumber right where the contractor wants it, and it isn't always easy."

All of the Idaco PETERBILTS are powered with Cummins 300 HP Diesels, and the speedometers of each truck show over 100,000 trouble free miles on them. PERFORMANCE is the one word which best explains the preference which loggers and lumber haulers of the Western States have for PETERBILT TRUCKS. Available in both steel and aluminum and with Diesels from 200 to 335 H.P. Peterbilt is sure to have a truck to meet your own exacting requirements.

Peterbilt MOTORS COMPANY

10700 MAC ARTHUR BOULEVARD OAKLAND, CALIFORNIA

HEAVY DUTY TRUCKS—MACDONALD LOW BODY & LIFT TRUCKS

San Francisco · Salt Lake City · Spokane · Seattle · Portland · Redding · Sacramento · Stockton · Fresno · Los Angeles · Denver
Phoenix · Boise · Albuquerque · Hawaii

Portrait of a Typical Barnett Customer

Yessir . . . Barnett's boys know how to keep 'em happy. Always "Johnny-on-the-spot" with data and special information or just plain, old-time "service" whenever it's needed.

You can call on 'em with absolute confidence for the latest in "know-how" about equipment, including—

SAWMILL MACHINERY
BARKERS **CHIPPERS**
SAFETY EQUIPMENT **GANG SAWS**
PNEUMATIC SYSTEMS

Offices and Stores at Eureka, Ukiah, No. Sacramento, Portland and Klamath Falls

We'll welcome your inquiries

FRED E. BARNETT CO.
1455 Custer Avenue
SAN FRANCISCO 24, CALIF.

Materials Handling Appointments Made

Stuart S. Caves, Jr., lumber dealer, Honeoye Falls, N. Y., has been named to head the Materials Handling Committee for the 1957 Building Products Exposition of the National Retail Lumber Dealers Association to be held in Philadelphia, November 4-7.

Serving with Mr. Caves on the committee are Joseph W. Brosius, Brosius & Smedley Co., Wilmington, Del.; Frank M. Hankins, Jr., H. H. Hankins & Bros., Bridgeton, N. J.; Elias Nuttle, Nuttle Lumber and Coal Co., Denton, Md., and C. Albert Stephan, Peter Lumber Company, Philadelphia, Pa.

A five-man committee has been at work for several months in advance of the general Committee, developing plans for staging materials handling events which will be a major feature of the 1957 Exposition. Watson Malone III, of Watson Malone & Sons, Philadelphia; John E. Moeling, of Sterling Lumber Co., Chicago; V. Joseph Wardein, of Ginter-Wardein Co., Alton, Ill.; R. R. Dooley, of United States Gypsum Co., and W. J. Salmon, of Building Supply News, who have been active in the development of early plans for the program, will continue as an Advisory Planning Committee to the general Materials Handling Committee.

Japan Builds Ship For Hauling Luaun

THE LUMBERMAN'S TOKYO, JAPAN, CORRESPONDENT

• A new 5,018-gross-ton Japanese freighter, the Daigen Maru No. 7, recently completed her maiden voyage from Japan to Davao, Philippines, and return. This ship was built especially for transporting luaun wood from the Philippines to Japan. On the out-bound legs of her voyages, the ship carries sundry goods to Formosa.

Namura Kisen K. K. of Osaka is the owner and K. K. Namura Zosenjo, the sister company at Osaka, the builder. The cargo ship was launched in February of this year and was completed late in April. She can hold about 1½ million board feet of luaun wood, which is about 20% more than an ordinary ship of similar tonnage.

The Daigen Maru No. 7 is 346 feet long overall, with a maximum speed of 13 knots and sea speed with full cargo 11.5 knots.

Fire Destroys Mill

Fire has destroyed the sawmill, lumber and some equipment of the Miller Lumber Co. at Westbridge, B. C. Owner Pete Miller said damage will run into several hundred thousand dollars.

GOING?

PACIFIC LOGGING CONGRESS

Seattle

Oct. 30, 31, Nov. 1

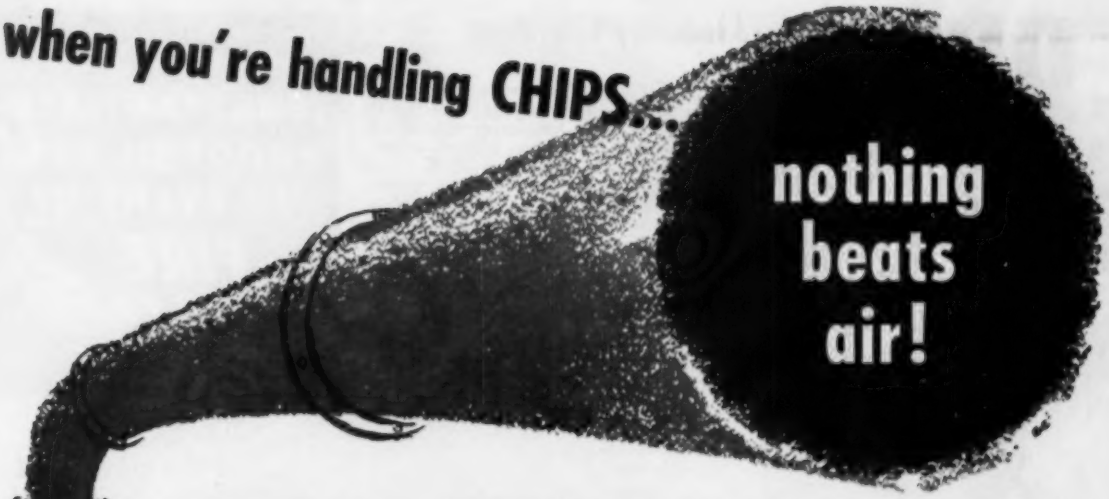
FLY THERE

on United. Best way to travel—fast and comfortable. Best way to arrive—relaxed and ready. Best way to return—leave later, have more time (and fun) at the convention. United links 80 cities coast to coast . . . offers schedules around the clock and fares that go easy on the budget—including an economical half-fare family plan (United believes husbands *like* to take their wives along to conventions). For information and reservations, call United or an authorized travel agent. When you go,

FLY UNITED

UNITED AIR LINES

when you're handling CHIPS...



SPECIFICALLY ... NOTHING BEATS *CONVEYAIR* FOR MOVING CHIPS *ANY DISTANCE — ANYWHERE — AT LESS COST!*

Conveyair's "Chipveyor" will reduce your chip-handling costs right down the line ... it costs less to install, less to operate, less to maintain ... but that's only half the Conveyair story; the real merit of this pneumatic conveying system lies in its *flexibility*, and its excellent performance over both short and long distances.

Conveyair's flexibility starts on the drawing board, where every Chipveyor is designed to do a specific handling job ... it may be required to move chips, hog fuel, planer shavings, sawdust or other granular materials a few hundred feet, or well over a mile ... to go under, over, or around obstacles ... to deliver the material under pressure or incorporate a cyclone to simulate gravity discharge. With this flexibility in design and installation, a Chipveyor is often the *only* conveying system which can be adapted to a mill without extensive and costly alterations to layout.

Conveyair maintains complete engineering and research facilities ... all components are built to rigid standards in our own plant ... factory-trained engineers supervise every installation ... service agencies are located in most principal cities.

PUBLISHERS PAPER COMPANY
Oregon City, Ore.

RAYONIER INC
Vancouver, B.C.

ANGLO-CANADIAN LUMBER CO
Vancouver, B.C.

pneumatic materials handling systems

Conveyair

Write for details of a Conveyair system in your mill.

Conveyair Sales Ltd: 125 West 1st St. • North Vancouver, B. C. • YOrk 1166
Conveyair Inc.: 921 S.W. Washington Ave. • Portland 5, Oregon • CApitol 2-1291

new book

gives you the facts on

modern

OUTBOARD POWER

for *lumbering* service

TODAY there's a *new kind* of outboard power for work boat duty! A complete line of new Evinrude *Aquasonic* models so advanced in capability, stamina, and smooth, quiet operation that they set entirely new standards of performance. Get the facts! Send coupon for booklet.

EVINRUDE MOTORS
Division of Outboard, Marine & Mfg. Co.
4631N. 27th Street, Milwaukee 16, Wisconsin

Send me booklet on outboard power for work boat duty.

Name.....

Address.....

City.....Zone...State.....

(In Canada: Mfd. by Evinrude Motors of Canada, Peterborough)

Industry Literature

U. S. Forest Products Laboratory Reports. Now available free from the U. S. Forest Products Laboratory at Madison, Wis., are the following reports. Second Growth is Good, Report No. 2083, which discredits widespread belief that second growth timber necessarily produces second rate lumber. It points out second growth can yield first rate wood—sometimes better than virgin timber. Air Drying and Sticker Staining of 4/4 Sugar Maple Flooring Stock in Upper Michigan, Report No. 2086, in which the effects of sheds, pile roofs and types of stickers in reducing drying losses are described. Preservative Treatment of Jack Pine and Longleaf Pine Posts by the Hot-and-Cold Bath and its Boiling-in-Water Adaptation, Report No. 2085, which compares the way preservatives penetrate into fence posts and are retained there when treated by the two methods.

Veneer Recovery. Two reports are available from the Pacific Northwest Forest and Range Experiment Station on veneer recovery. Both are by E. H. Clarke and A. C. Kanuss. One deals with northwestern Oregon, the other with southwestern Oregon. Copies are available from the experiment station in Portland, Ore.

Hardwood Flooring Grade Rules. The latest revisions in grading practices at northern hardwood flooring mills are included in a booklet "Grading Rules for Northern Hard Maple, Beech and Birch Flooring" now available from the Maple Flooring Manufacturers Association, Chicago 1, Ill.

Production of Wallboard from Wood Waste. This report by the Department of Northern Affairs and National Resources, Forestry Branch at Ottawa, describes the wallboard production procedures, the types of boards possible, and the machinery necessary. Costs of plants are discussed.

Western Red Cedar Lumber Recovery from a Western Washington Sawmill. This study was conducted at the mill of E. C. Miller Lumber Co., Aberdeen, Wash. The results, in charts with observations by E. E. Matson of the Pacific Northwest Forest and Range Experiment Station, are reported.

Annual Report on Wood Protection 1955, edited by Gunther Becker and Gerda Theden, Berlin-Dahlem, Unter den Eichen 87, Western Germany. This is a digest of world literature on the protection of wood against deterioration. The 300-page book is divided into four sections: classification of subject matter, abstracts arranged according to this classification, bibliography and index. The abstracts are in German and English.

Wood Using Industries of New York State, by the State University College of Forestry, Syracuse, N. Y. The 130-page book was authored by professor Raymond J. Hoyle, chairman of the college's department of forest utilization, and Russell C. Deckert, assistant professor of forest utilization.

• Ridgewood Lumber Co., Willits, Calif., shut down late in July. Future plans are indefinite.

COULD YOU SUBSTANTIATE PROOF OF LOSS IN EVENT OF *FIRE*

You *can* with a GENERAL APPRAISAL! It is a factual record of all plant assets, showing insurable values as well as present and replacement values *– positive proof of loss.*

55 years of authoritative service

GAC GENERAL APPRAISAL COMPANY

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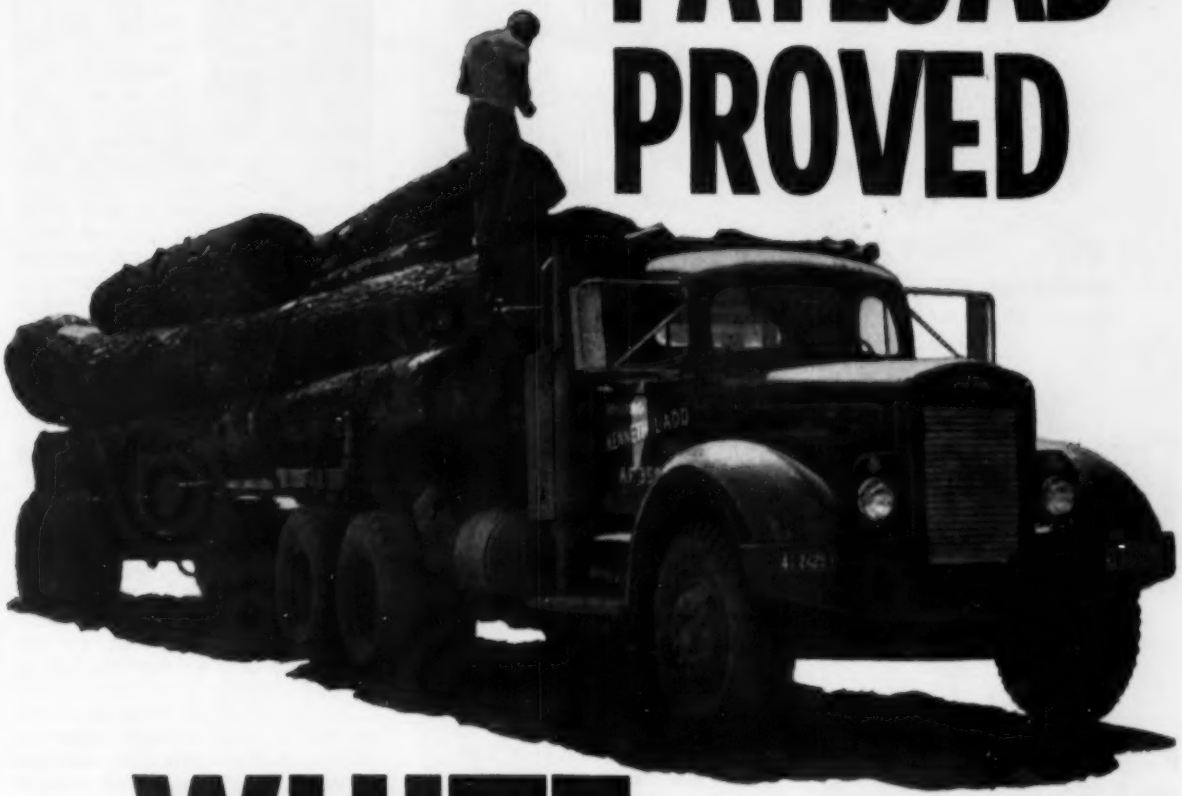
Biggest Beams Ever

The largest laminated beams ever built by American Fabricators division of Bellingham Shipyards Co., Bellingham, Wash., have been ordered for a building at Henrietta, N. Y. There will be six beams, each 100 feet long and each containing 9000 board feet. They will measure 12½ inches thick and taper from 5 feet, 8 inches center height to 4 feet, 2 inches at the ends.

All-year
outdoor playground
Seattle, Wash.
Make your headquarters at The Stewart Hotel — preferred by vacationists and businessmen alike. Convenient downtown location — near theaters, entertainment and all shopping, yet easily accessible to all of Seattle.
Finest food and service. Garage facilities. Radio in every room.
from $4.50 single
2nd & Stewart Sts.
The STEWART HOTEL

Haul More at Less Cost with the truck that's

PAYLOAD PROVED



WHITE *light-weight* DIESELS

Your local White Representative can give you the dollars and cents figures. He'll show you how the light-weight characteristics of engine, rear axle, power train and high tensile steel frame can help you yield more profit from your operation.

For more payload per truckload, *go the White way!* See your White Representative NOW!

Proved again and again—
White's "Unit Option Plan"
offers you the best truck
investment you can make!

White

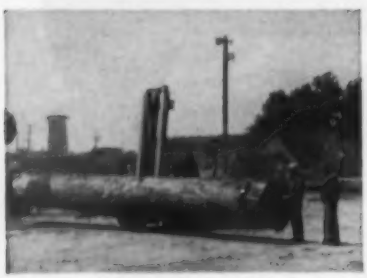
THE WHITE MOTOR COMPANY
CLEVELAND 1, OHIO
Factory Branches, Distributors and Dealers Everywhere

FOR MORE THAN 55 YEARS THE GREATEST NAME IN TRUCKS

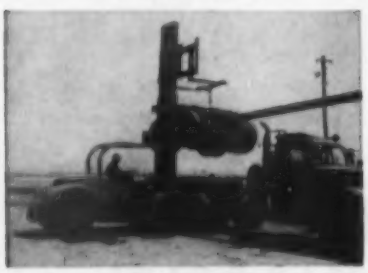
HYSTER® LIFT TRUCK METHODS ASSURE CAREFUL HANDLING OF VALUABLE 9½-TON CEDAR LOGS FOR EXPORTER

Unloading 9½-ton cedar log

Stacking



Moving logs to storage



Lifting empty trailer for "piggy back" ride

SAMOA, CALIFORNIA — Fairhaven Forest Products has developed procedures for efficient, yet protective handling of valuable cedar logs. A first grade Port Orford cedar log contains 2,500 feet, by Scribner scale, weighs an average of 9½ tons. To protect this investment in valuable cedar, each log must be handled as carefully as possible.

A fleet of Hyster 15,000 and 18,000 lb. capacity lift trucks (on pneumatic tires) provide the motive and lifting power for lifting logs off standard log trucks, transporting to the scaler station (where ends are trimmed and log cut to order), and to storage — where logs are often stacked as high as 15 feet. Hyster Lift Trucks operate on concrete surfaces or ungraded storage lot, unaffected by adverse weather, and are used to transport the logs to a dock for easy loading directly onto export vessels.

The Hyster Lift Truck also lifts empty trailer on log truck to "piggy back" trailer back to loading site, thus saving wear and tear on trailer.

Company officials state they have developed an effective handling system which has materially reduced overall operating costs.

Your Hyster Dealer makes it his business to keep up with materials handling progress in the lumber industry. Call him today. He may help you reduce your handling costs by as much as 80%!

Call your Hyster Dealer today. He is listed in your telephone directory under "Trucks-Industrial"

HYSTER COMPANY

HYSTER

Hyster Industrial Trucks Increase Profits for Lumbermen

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FACTORIES: Portland, Oregon; Danville, Illinois; Peoria, Illinois; Nijmegen, The Netherlands

New Zealander Visitor

Recent visitor to the states was Norman Pollard, general manager of Henderson & Pollard, Ltd., Auckland, New Zealand. Completing a trip that took him to England and through many of the states in this country, Pollard concluded his nearly three months trip by visiting some western lumber manufacturing operations. Principally seeking new methods in door manufacture, his trip in the United States took him through the south and east.

Henderson & Pollard are manufacturers of plywood, coreboard, doors, timber and millwork in New Zealand.

Smith to Establish Alaska Birch Mill

• Birch panel and furniture stock will be produced at a new plant being established at Talkeetna, 112 miles north of Anchorage, Alaska, by the Smith Hardwood Co., Longview, Wash. Initial shipments are anticipated this fall.

Smith Hardwood, headed by L. R. Smith, will initially ship the plant's output to Long Beach, Calif., for kiln drying, but later will install a kiln at the mill.

The sawmill to be installed was assembled at Longview and shipped to Anchorage. It will have a minimum capacity of 25,000 feet a shift. This is government regulation. It will cut timber from government owned land under an agreement with the Bureau of Land Management. The timber is relatively small, 8 to 14 inches, but is of high quality.

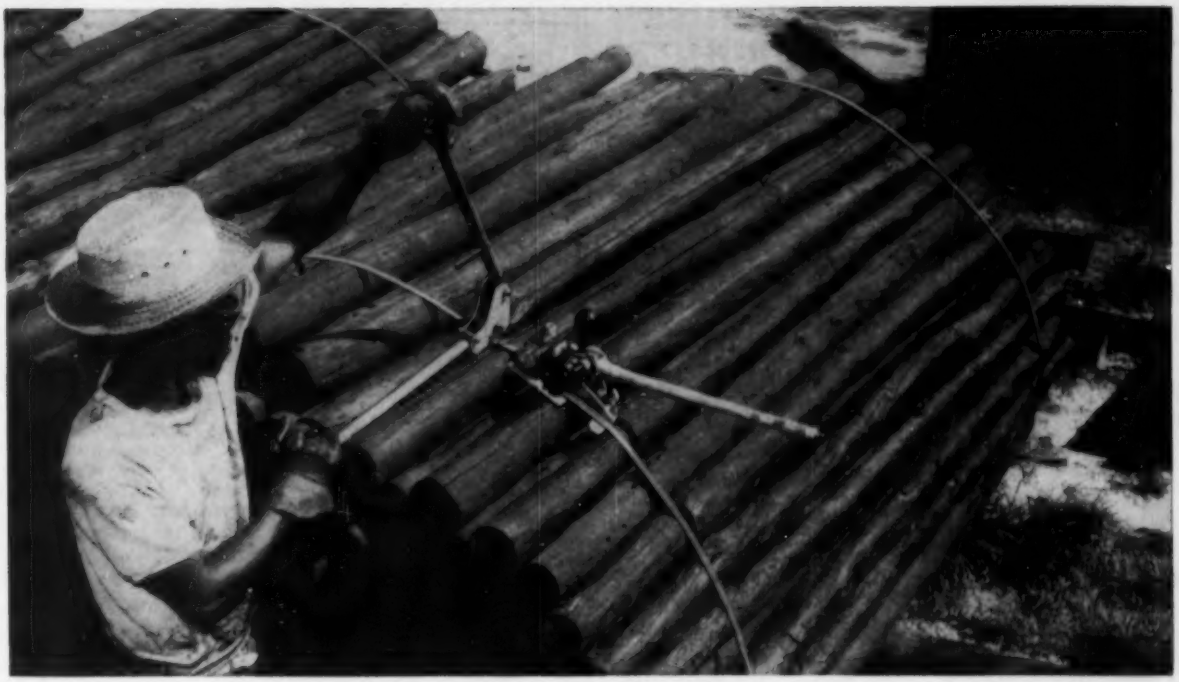
Wilson Smith and Guy Hendricks, both previously with the firm at Longview, will be in charge of the operation.

Smith Hardwood had previously experimented with the Alaska birch at its plant in Longview, using birch logs shipped from Talkeetna.

50-Year Old Texas Sawmill Closes

Foster Lumber Co., Fostoria, Tex., one of the oldest mills in the south, has announced that it will close its mill permanently. The mill has operated for 50 years and in 1956 cut over 20 million feet of lumber.

Foster will continue to manage and operate about 50,000 acres of timber land and will retain a large number of retail lumber yards.



"With USS Gerrard Steel Strapping *we've cut material handling time by more than 60%,"*

SAYS UNITED CREOSOTING COMPANY, HOUSTON, TEXAS

APPROXIMATELY TWO YEARS AGO, United Creosoting Company began using USS GERRARD Flat Steel Strapping for tying fence posts into bundles for pressure treatment.

Previously, the posts—which range in size from 6 to 12 feet—were manually loaded onto tram cars, then wrapped with black annealed wire and hand-tightened with pliers. Two men required 20 to 30 minutes to load a tram car with 100 to 150 posts. After treatment, the loaded tram cars were removed from the pressure cylinder and deposited in a storage area. Quite frequently, the wire broke due to rough handling, and hours were wasted restacking the posts. But this is no longer the case.

With USS GERRARD Steel Strapping, it's a totally different story. Right at the beginning, the stacks of posts are bound into snug bundles with two steel bands of Gerrard Flat Strapping, or three steel bands if the posts are over nine feet long. From then on, all the loading and unloading is done by crane—onto the tram cars, into the storage area, onto railroad cars and trucks for shipment—all the while held secure by the original steel bands of Gerrard Steel Strapping.

"The reduction of handling time, before and after treating the wood, releases crews of up to 12 men for other important jobs, and has made hand stacking for shipment a thing of the past," says Frank P. Mayfield, Executive Vice President of United Creosoting. "We have gained both improved efficiency and lower costs by using USS GERRARD Steel Strapping.

"Although we are in an unusually moist climate, we have had no trouble with corrosion, and I know of no cases where our Gerrard-strapped bundles have broken open, despite the swelling of the wood because of treatment. Our customers like steel-strapped bundles, since it cuts their handling time, too."

You, too, can receive the time- and money-saving advantages that USS GERRARD has to offer. No matter what your packaging-shipping problem is, we'll come up with a practical solution. Contact a USS GERRARD sales representative for any help you need.

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SENTRIES range from single level marking units to multi-level marking, recording and counting systems and are priced from $2,950. You are cordially invited to write for detailed information.

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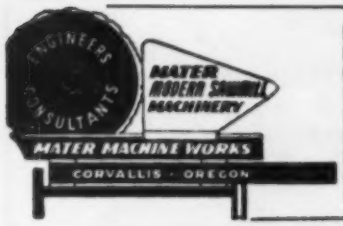

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Lumber Prices

• Southern Pine Prices (KD Stock)

Vertical Grain Flooring	BB	C	D
1x4	205.00	200.00	195.00
Flat Grain Flooring			
1x4	150.00	145.00	127.00
1x6	175.00	160.00	130.00
Drop Siding			
1x6 No. 106	191.00	170.00	130.00
No. 116	191.00	170.00	130.00

Boards & Shiplap	1x6	1x8	1x10	1x12
No. 1	130.00	130.00	132.00	170.00
No. 2	79.00	81.00	78.00	97.00
No. 3	66.00	72.00	69.00	70.00

No. 1 Dimension	12	14	16	18	20
2x4	100.00	100.00	102.00	115.00	115.00
2x6	100.00	103.00	100.00	115.00	115.00
2x8	98.00	96.00	95.00	110.00	110.00
2x10	115.00	108.00	110.00	120.00	120.00
2x12	125.00	115.00	115.00	130.00	130.00
No. 2 Dimension					
2x4	90.00	92.00	93.00	103.00	103.00
2x6	88.00	89.00	88.00	100.00	100.00
2x8	88.00	88.00	86.00	97.00	97.00
2x10	87.00	90.00	88.00	100.00	100.00
2x12	88.00	88.00	88.00	105.00	110.00

• Douglas Fir Lumber Prices

1x8 Utility S4S KD	$ 48- 51.00
2x4 Comtruction Dimension S4S KD	83- 85.00
1x4 C&Btr VG Flooring KD	170-175.00
1x6 C&Btr Drop Siding KD	157-160.00
1x6 C&Btr S4S KD	170-175.00
1x8 C&Btr S4S KD	170-175.00
1x10 C&Btr S4S KD	170,175.00
1x12 C&Btr S4S KD	215-220.00

CONSTRUCTION Timbers and Plank	
3x12 6-20′	$ 84- 87.00
3x12 22-24′	89- 92.00
3x12 26-32′	97-102.00
4x4 8-20′	85- 88.00
4x4 22-24′	90- 93.00
4x4 26-32′	98-103.00
6x6 8-20′	82- 85.00
6x6 22-30′	89- 92.00
6x6 32-40′	104-107.00
8x8 8-20′	81- 84.00
8x8 22-30′	86- 89.00
8x8 32-40′	101-104.00
6x10, 8x10, 10x10, 12x12— 8-20′	81- 84.00
6x10, 8x10, 10x10, 12x12—22-30′	86- 89.00
6x10, 8x10, 10x10, 12x12—32-40′	101-104.00
Crossties	58- 61.00

CONSTRUCTION Dimension (Green)	
2x4 6-24′	$ 69- 71.00
2x6 6-24′	70- 78.00
2x8 6-24′	69- 72.00
2x12 6-24′	70- 73.00

STANDARD & Btr. Boards (Green)	
1x4 6-20′	$ 46- 49.00
1x8 6-20′	58- 61.00
1x12 6-20′	58- 61.00

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¼-inch AD SOIS $68.00

• Western Pine Prices

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SELECTS S2 or 4S	4/4RW	5/4RW	6/4RW
C Select RL	$261.23	$267.49	$255.80
D Select RL	178.37	195.46	177.53
SHOP S2S	**No. 1**	**No. 2**	
5/4	$129.46	$ 96.54	
6/4	126.03	94.39	
COMMONS S2 or 4S	**No. 2**	**No. 3**	
1 x 8″ RL	$105.24	$ 71.21	
1 x 12″ RL	116.41	73.86	
4/4 No. 4 Common S2 or 4S	50.78		

IDAHO WHITE PINE

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Choice (C) RL	$274.69	$287.50
Quality (D) RL	197.34	257.75
	Colonial	Sterling Stand.

COMMONS S2 or 4S	No. 1	No. 2	No. 3
1 x 8″ RL		$101.28	$ 61.78
1 x 12″ RL		104.22	64.85
4/4 UTILITY (#4) S2 or 4S RW&L			

SUGAR PINE

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#1 & 2 Clear RL	$271.79	$288.52	$280.82
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D Select RL	216.12	218.40	215.76
SHOP S2S	**No. 1**	**No. 2**	**No. 3**
5/4	$129.86	$ 96.48	$ 65.56
6/4	140.34	99.66	66.31
8/4	157.90	107.14	68.52

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2 x 4 No. 1 Dimension RW&L	78.04
2 x 4 No. 2 & Btr. Dimension RW&L	71.07

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Operation Divided By New Resaw

• Installation of a horizontal resaw at the Cranbrook, B. C., division of Crestbrook Timber, Ltd., has resulted in dividing the operation into two sections.

Frank Hern, former foreman of the company's Mineral Lake sawmill, has been named superintendent of the milling section, which includes the resaw, merry-go-round, edger, trimmer and green sorting chain. He will also oversee sawing procedures at the Mineral Lake and St. Mary Lake sawmills. Lumber from these, as well as from Canal Flat and independent mills, will be channeled to the new resaw.

John Konrath succeeds Hern as Mineral Lake mill foreman.

New superintendent of the planing mill and dry kiln section at Cranbrook is Fritz Roos, a former employe of Kootenay Forest Products and Walmac Planing Mills.

• Mendo Mill Lumber Co., a sawmill operation 20 miles west of Ukiah, Calif., has been sold to Don Philbrich of Ukiah. Former owners were Ross and John Mayfield.

Chipper Douses Burner

For the first time in nearly half a century, the main waste burner at Canadian Western Lumber division of Crown Zellerbach Canada, Fraser Mills, B. C., is cold. The big, screen-topped tower now stands only as a symbol of the passing of one era and the coming of the industry's new concept for complete utilization of wood. Material that used to be fed into the burner as waste now goes to the chippers for pulp. A. C. Ewart, resident manager, estimates that during 45 years of operation about 250,000,000 board feet a year went into the burner.

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This installation view is typical of Hot Plate Presses, designed and built by WILLIAMS-WHITE & CO. in capacities from 50 to 5,000 tons for the production of plywood, hardboard and allied materials. Each is engineered to your specifications. Take advantage of our designing and building "know-how." For details, write any of our representatives or direct to WILLIAMS-WHITE & CO. Ask for Bulletin 200-A.

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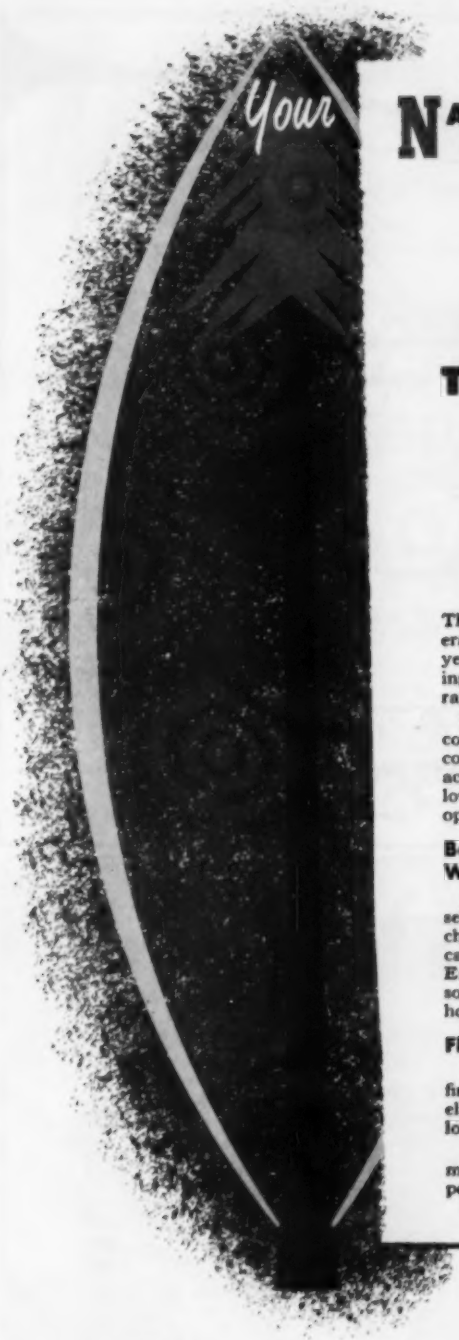

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3. **Feeding planers, trimmers, resaws and similar machines.**
4. **Feeding lumber stackers.**

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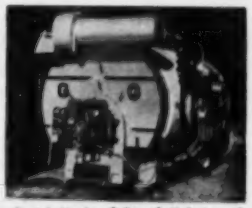

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MACHINERY & EQUIPMENT

Enterprise Announces New Band Headrig

• A new 6-foot band headrig by Enterprise Co., Columbiana, Ohio, incorporates several new engineering techniques to increase rigidity and in turn improve operation, speed output, and reduce maintenance and down time.

A new strain mechanism eliminates the moving of columns and maintenance of knife edges on the band. Strain peaks on the blade are counter-acted so that blade life is increased.

All revolving parts of the band turn on anti-friction bearings. The low-friction wheel raise is totally enclosed, eliminating thread clogging. The mill can operate as a right or left hand unit without new parts or machining of components. Instructions for changing the mill over are furnished by Enterprise.

•

Higher Ratio Drives

Higher ratios of 24:1, or 20:1 in two smaller sizes, have been added to the line of all-steel, double reduction, shaft-mounted drives manufactured by The Falk Corporation. Outside dimensions and torque ratings remain the same. Advantages sited for the higher ratio units are use of smaller sheaves to obtain a given output speed, and a saving in motor cost when, because of lower output speed, a 1750-rpm motor can be used instead of a more expensive slower speed motor. Units are available for horizontal and vertical application, ¼ to 30 horsepower with output speeds as low at five rpm.

•

• Acme Steel Co. has started construction at Riverdale, Ill., on a $23 million steelmaking plant.

30th Anniversary

Champion Friction Company, Eugene, Ore., manufacturer of frictions for all kinds of logging, lumbering and industrial equipment, is 30 years old this year. The firm was established in Aberdeen, Wash. by W. H. Clubb, still president and manager. The firm manufactures a wide variety of friction blocks: The Champion friction block, a laminated block of asbestos metallic and friction leather board; the Gralam friction block, a solid asbestos block; and special hardwood blocks and hardwood blocks with asbestos inserts. It also produces Champion E-Z-Glide anti-friction stock for edgers, gang saws, band saws and headrigs.

•

Dodge Trucks Designed For Off-Highway Use

• Power-Wagon trucks just introduced by Dodge are designed for many off-highway uses, hauling loads in sand, mud and snow. The units will climb 60% grades.

Largest of the three new models in 4-wheel drives is the W500, powered by either a 310-hp, 6-cycle engine or a 197-hp V-8. It has a maximum GVW rating of 18,000 pounds.

Two smaller models are offered with either a 120-hp, 6-cycle engine or a 204-hp V-8 engine. One is the W100 with a maximum GVW rating of 8000 pounds.

•

Line Expanded

A 450 horsepower Turbodiesel, the LRT-6, has been added by the Cummins Engine Co., Inc., Columbia, Ind., broadening the horsepower range of the slow speed, heavy duty L engines offered by the firm. Previous models in the L series developed 250 and 300 horsepower. The LRT-6 has a rating of 450 horsepower at 1100 rpm and displacement of 2477 cubic inches. Its 6-cylinder engine is equipped with a Cummins T-590 turbocharger.

PERSONALITIES

New vice-presidents of Willys-Overland Export Corp. are ***Sydney W. Taylor*** and ***L. Keith Covelle, Jr.*** Both are associated with Willys Motors, Inc., parent company, Taylor is in charge of engineering and Covelle as executive assistant to ***S. A. Girard,*** vice-president of Willys Motor and president of Willys-Overland Export.

Elliott M. Haught, who has been with Peterbilt Motors Co., Oakland, Calif., for the past 12 years selling and working as assistant to ***Al Ramos,*** service manager, has been appointed district sales representative for Peterbilt logging and lumber trucks in the California redwood region.

E. M. HAUGHT R. D. BURDETTE

New sales representative for Stanley Steel Strapping is ***Richard D. Burdette.*** Burdette, who joined Stanley in February, 1956, will cover most of the counties in Alabama, will headquarter in Birmingham, Ala. He was formerly associated with B. F. Goodrich Co.

Vance Roley has been named manager of the Prentice Materials Handling Co., newly appointed Yale lift truck dealer in Oregon, southwest Washington and northern California. He has been sales manager of the Portland firm since 1955.

New manager of the southwest region for Nicholson Manufacturing Co. is ***Cecil A. Carriere,*** a veteran of 18 years in design engineering and sales engineering. He will headquarter in San Francisco. His territory includes California, Nevada, Arizona, New Mexico, Utah, Colorado, Wyoming and the Klamath Falls-Medford area in Oregon.

Dave B. Gibson, Jr., has retired from Atkin Saw division after 48 years of continuous service, the past 46 of which were spent servicing the mid-south.

Brooks McCormick is now executive vice-president of International Harvester Co., succeeding **Christian E. Jarchow** who has retired after 32 years of service. Jarchow continues as a member of the board of directors. McCormick has been with I-H since 1940, working in plant and sales work, as director of the firm's Great Britain plant.

Appointment of **Jack A. Poulson** as assistant salemanager of its Tiremaster division has been announced by Salsburg Corp., Los Angeles manufacturer of clutches and transmissions, tire changing and other equipment.

Donald L. Clawson is new district manager of the northeastern region for Lamson Mobilift Corporation, Portland, Ore. He will headquarter in Long Island City, N. Y., will be responsible for coordinating all sales and service of Lamson Mobilift dealers in the northeast. He has long field experience with the firm, was previously with Clark and Buda.

D. L. CLAWSON T. G. GRANRYD

T. G. Granryd is new manager of the product improvement department of The Frank G. Hough Co., Libertyville, Ill. A former senior engineer, Granryd was promoted to project engineer early in 1957.

Frederick G. Reiter and **Floyd L. Wheaton** have been elected vice-presidents of Bendix-Westinghouse Automotive Air Brake Co. Both are veteran executives of the firm, Reiter as treasurer and Wheaton as general sales manager. **Dugald Black** becomes a director of the company.

Kenneth L. Stockum has been named factory representative in the eastern division for Atkin Saw division and will maintain his sales headquarters in Pittsburgh, Pa. He was formerly a field engineer with Henry Disston division of H. K. Porter.

Hanna Adds Seal to Pilot Air Valves

• To prevent premature wear and damage to its valves caused by settling of dirt, grit and abrasive around the pilot valve stem, Hannan Engineering Works has made available a new Flo-Pilot series of pilot valves.

A basic part of the valve is a small synthetic rubber boot which snaps in place around the valve stem, sealing all critical parts from dirt and abrasives. The basic value has five optional actuating heads: palm button, ball cam, lever, locking lever and mechanical link clevis. These are interchangeable in less than 30 seconds by removing two pins. The valve is built for 150 psi air operation and ¼-inch pipe ports.

•

New Portland Quarters

Ohio Match Co. has moved into new Pacific Coast headquarters in Portland, Ore. A feature of the new location is the use of various species of wood in finishing of offices. Complete stocks of OK Ohio knives, all types of wod manufacture, planing, chipping and other equipment produced by the firm will be carried in stock. Jim Snyder is Pacific Coast manager and will headquarter in the Portland office. The firm has factory offices and representatives in Seattle, Wash., Eugene, Ore., and Oakland and Los Angeles, Calif.

Various Drives Offered On Newman Surfacer

• The new Model P830 surfacer of Newman Machine Co., Greensboro, N. C., offers direct coupled motor drive, V-belt motor drive or direct shaftless motor drive on cutterhead spindle. The unit is 30x8 inches, is 44 inches high.

A motorized power hoist for raising and lowering the table is available, along with other optional equipment.

Other similar models of this type are the B-820, 20x8 inches, and the P-824 which is 24x8 inches.

•

New Century Distributor

Century Electric Co., St. Louis, manufacturer of motors and generators, has named G. O. Toms Electric Co. in Spokane, Wash., as a distributor to handle its complete line.

Yours for the Asking

Allis-Chalmers Lift Truck. The FT-100 lift truck of Allis-Chalmers is described in a new bulletin, BU-334A, now available from the Buda Division, Allis-Chalmers Manufacturing Co., Milwaukee, Wis.

Irvington Equipment. Its No. 88 belt-driven end surfacer and No. 62 stud trimmer, printer and waxer are described in recent bulletins now available from Irvington Machine Works, Inc., 1808 N. E. 7th Avenue, Portland 12, Ore., and 3 Colfax N. E., Grand Rapids 5, Mich.

Materials Handling. A one-man material handling system is described in an 8-page booklet produced by Lewis-Shepard Products, Inc., manufacturer of electric fork trucks and related materials handling equipment. In the system, each employe works alone, serving simultaneously as a stripper, checker and loader. Basic parts of the system are electric fork lift trucks and storage racks. Copies are free from Lewis-Shepard Products, Inc., Dept. R-12, 125 Walnut Street, Watertown 72, Mass.

Pillow Blocks. Photographs, engineering drawings and tabulated data on dimensions, shaft sizes, weights and radial load ratings of Spher-Align pillow blocks is now available from Dodge Manufacturing Corp., Mishawaka, Ind.

Wood Saws. All types of circular saws, grooovers, cutters, trimmers, knives, slitter, band saws and special mounting devices manufactured by Huther Bros. Saw Manufacturnig Co., Inc., are shown in a new catalog published by the firm. Copies from the firm at 1290 University Avenue, Rochester 7, New York, ask for catalog WS-300.

Materials Handling With Two-Way Radio. A 6-page booklet on how to modernize your materials handling operations for two-way radio, containing information regarding FCC licenses and types of equipment available for various applications, is available from the Communications Products Department, General Electric, Syracuse, N. Y., ask for Bulletin ECR-106B.

Light-Weight Diesels. Folder illustrates and describes with full engine specifications the line of American MARC Hellett air-cooled diesels. These are valve-in-head, 4-cycle engines with high-pressure solid-injection fuel system. Write for Form No. GAF-157 to American MARC, Inc., Box 549, Inglewood, Calif.

Power Transmission Equipment. Complete line illustrated and described in 12-p. color booklet, including synchronized transmission series, new StepMatic transmissions, TransVerters and torque converters. Write Clark Equipment Co., Transmission Div., Jackson, Mich.

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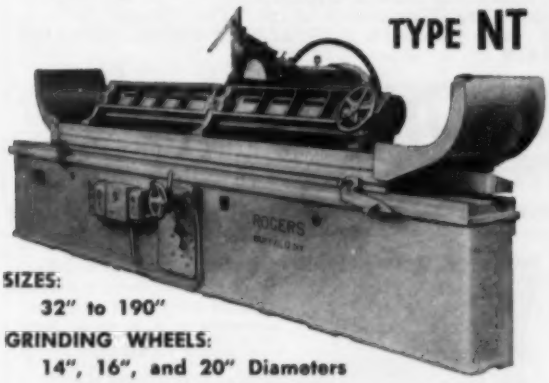

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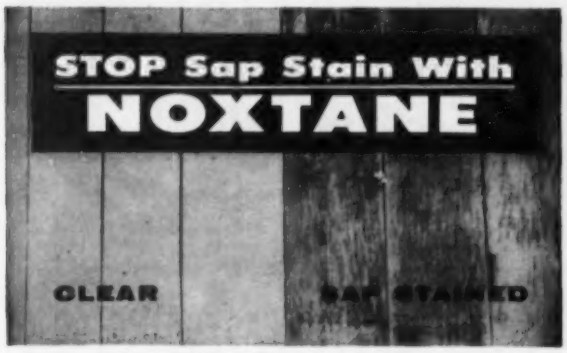

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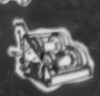

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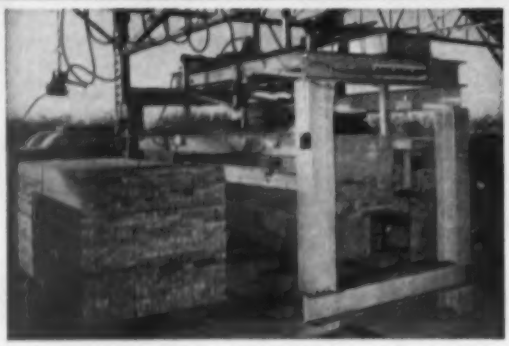

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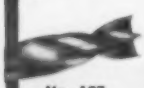

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List of companies supplying Machinery, Equipment, Supplies and Services used in the Forest Industries.

ABRASIVES
Carborundum Co., Niagara Falls, N. Y.
Macklin Co., Jackson, Mich.
Minnesota Mining & Mfg. Co., St. Paul, Minn.
The Norton Co., Worcester, Mass.; Los Angeles
Simonds Abrasive Co., Philadelphia, Pa.

ADHESIVES
American Cyanamid Co., New York City
American-Marietta Co., Seattle, Portland, New Westminster, B. C.
Armour & Co., Chicago, Ill.
Bakelite Corp., New York City, N. Y.
Borden Co., Chemical Division, New York City; Seattle
Catalin Corp., New York City, N. Y.
Monsanto Chemical Co., St. Louis, Mo.; Springfield, Mass.; Seattle, Wash.; Springfield, Calif.
Perkins Glue Co., Lansdale, N. Y.
Quaker Oats Co., Chemical Division, Chicago, Ill.
Reichhold Chemicals, Inc., White Plains, N. Y.; Seattle; San Francisco; Port Moody, B. C.
Resinous Products Div., Rohm & Hass Co., Philadelphia
Swift & Co., Adhesive Product Division, Chicago

AIR COMPRESSORS—AIR TOOLS
Chicago Pneumatic Tool Co., Chicago, Ill.
Davey Compressor Co., Kent, Ohio
Gardner-Denver Co., Quincy, Ill.; Seattle; Portland; San Francisco; Denver, Colo.; Dallas, Texas
Ingersoll-Rand Co., New York City, N. Y.
Joy Mfg. Co., Pittsburgh, Pa.
LeRoi Division, Westinghouse Air Brake Co., Milwaukee, Wis.
Portland Machinery Co., Portland, Ore.
Quincy Compressor Co., Quincy, Ill.
Worthington Co., Harrison, New York; Portland

AIR CYLINDERS & VALVES
Caldwell Machinery Co., Portland, Ore.
Ledeen Mfg. Co., Los Angeles, Calif.
John M. O'Brien Co., Portland, Ore.

AIR MOTORS
The Elmco Corporation, Salt Lake City, Utah
Gardner-Denver Co., Quincy, Ill.; Seattle; Portland; San Francisco; Denver, Colo.; Dallas, Texas
Salem Equipment & Supply Co., Salem, Ore.

APPRAISALS
General Appraisal Co., Seattle; Portland; San Francisco; Los Angeles; Spokane, Wash.; Vancouver, B. C.
U. S. Appraisal Co., Seattle, Wash.

AUTOMATIC SETWORKS
See "Setworks, Automatic"

AXLES
Axle Division, Eaton Mfg. Co., Cleveland, O.
Kay-Brunner Steel Production, Inc., Axle Div., Alhambra, Calif.
Memphis Equipment Co., Memphis, Tenn.
Timken-Detroit Axle Division, Detroit, Mich.
Standard Forge & Axle Co., Montgomery 2, Ala.

BAND WHEEL GRINDING
Wilder Saw Works, Fresno, Calif.

BARKERS
Andrus Mfg. Co., Eugene, Ore.
Drain Machinery & Supply Co., Drain, Ore.
Eureka Boiler Works, Eureka, Calif.
Ederer Engineering Co., Seattle, Wash.
Filer & Stowell Co., Milwaukee; Portland
Hansel Engineering Co., Seattle; Vancouver, B. C.
Improved Machinery, Inc., Nashua, N. H.
Nelson Electric Mfg .Co., Tulsa, Okla.
Nicholson Mfg. Co., Auburn, Wash.
E. V. Prentice Co., Portland, Ore.
Sumner Iron Works, Everett, Wash.; Vancouver, B. C.
Soderham Machine Mfg. Co., Talladega, Ala.
Western Barkers Ltd., Vancouver, B. C.

BATTERIES
Autolite Battery Corp., Toledo, Ohio
Electric Storage Battery Co., Industrial Div., Philadelphia, Pa.
Pacific Battery Mfg. Co., Portland, Ore.
Prest-O-Lite Battery Co., Inc., Toledo, Ohio
Willard Storage Battery Co., Cleveland, Ohio

BEARINGS
Dodge Manufacturing Corp., Mishawaka, Ind.
Fafnir Bearing Co., New Britain, Conn.; Portland
Federal Mogul Corporation, Detroit, Mich.
Graphite Metallizing Corp., Yonkers, N. Y.
Link-Belt Co., Seattle; Portland; San Francisco
J. W. Minder Chain & Gear Co., Portland; Los Angeles
Schafer Bearing Div., Chain Belt Co., Downers Grove, Ill.
SKF Industries, Inc., Philadelphia, Pa.
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Degan Belting Co., San Francisco, Calif.
Fort Worth Steel & Machine Co., Fort Worth, Texas
Flexible Steel Lacing Co., Chicago, Ill.
Gates Rubber Co., Denver, Colo.
Goodall Rubber Co., Trenton, N. J.
B. F. Goodrich Co., Akron, Ohio; Portland; Seattle
Goodyear Tire & Rubber Co., Akron, Ohio; Portland; Seattle
Graton & Knight Co., Worcester, Mass.
Hewitt Rubber Div., Hewitt-Robbins, Inc., Stamford, Conn.
Johns-Manville Corp., New York City, N. Y.
Peat Belting & Rubber Co., Seattle, Wash.
Manhattan Rubber Div., Raybestos-Manhattan, Passaic, N. J.
Scougal Rubber Mfg. Co., Seattle, Wash.
Thermoid Company, Trenton, N. J.; San Francisco; Portland; Houston, Texas; Atlanta, Ga.
Mechanical Rubber Goods Div.—U. S. Rubber Co., New York City, N. Y.; Atlanta, Ga.; Portland; San Francisco

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Henry Disston & Sons Co., Philadelphia, Pa.; Seattle
R. Hoe & Co., New York; Portland; Birmingham, Ala.
Metal Processing Co., Portland, Ore.
Pacific Saw & Knife Co., Portland
Simonds Saw & Steel Co., Fitchburg, Mass.; Portland

BLOWPIPE SYSTEMS
American Sheet Metal Works, Inc., Portland
Anderson Blowpipe & Mfg. Co., Seattle, Wash.
Archer Blower & Pipe Co., Seattle, Wash.; Portland
Central California Blowpipe Co., Escalon, Calif.
Conveyair Company Ltd., Vancouver, B. C.
Jacksonville Blowpipe Co., Jacksonville, Fla.
The Kirk & Blum Mfg. Co., Cincinnati, Ohio
National Blower & Sheet Metal Co., Tacoma, Wash.
Ohio Blowpipe Co., Cleveland, Ohio
Medford Blowpipe Co., Medford, Ore.
Rader Pneumatics, Inc., Portland; Vancouver, B. C.
Rees Blowpipe Mfg. Co., Berkeley, Calif.; Vancouver, B. C.

BOILERS
Gabriel Boiler & Fabrication Co., Portland
Seattle Boiler Works, Seattle, Wash.

BOILER WATER TREATMENT
Coast Neutralizer Co., Portland, Ore.
Standard Chemical & Engineering Co., Seattle (Boil-out Service)

BOLTS and NUTS
Bethlehem Pacific Coast Steel Co., San Francisco; Seattle; Portland; Spokane, Wash.; Los Angeles; Phoenix, Ariz.; Vancouver, B. C.
Northwest Bolt & Nut Co., Seattle

BOOM and Tug BOATS
L. S. Baier and Associates, Portland
Drain Machinery & Supply Co., Drain, Ore.
Gunderson Bros. Engineering Corp., Portland
Ilwaco Boat Works, Ilwaco, Wash.
Marine Construction & Design, Seattle
Nichols Boat Works Co., Hood River, Ore.

BRAKES, Air, Electric
Bendix-Westinghouse Automotive Air Brake Co., Elyria, Ohio; Berkeley, Calif.
Power Brake Equipment Co., Portland
Warner Electric Brake & Clutch Co., Beloit, Wis.
Westinghouse Air Brake Co., Wilmerding, Pa.

BRAKE BLOCKS, LININGS, DRUMS
American Manganese Div., American Brake Shoe Co., Chicago
Champion Friction Co., Ore., Eugene, Ore.
Gatke Corp., Chicago, Ill.
Gunnite Foundries Corp., Automotive Div., Rockford, Ill.
Johns-Manville Co., New York City, N. Y.
Goodyear Rubber & Asbestos Co., Portland
Raybestos-Manhattan Corp., Grey Rock Div., Manheim, Pa.
World Bestos Corp., New Castle, Ind.

BRIQUETTE MACHINERY
Canadian Sumner Iron Works, Vancouver, B. C.
Wood Briquettes, Inc., Lewiston, Ida.
Sumner Iron Works, Everett, Wash.

CARRIAGES—Riderless—automatic
The Enterprise Co., Columbiana, Ohio
Forest Products Machinery Inc., Salem
Mater Machine Works, Corvallis
Mill Equipment, Inc., Seattle

CARRIAGES
Albany Machine and Supply Co., Albany, Ore.
Canadian Sumner Iron Works, Vancouver, B. C.
Corley Mfg. Co., Chattanooga; Portland
The Enterprise Co., Columbiana, Ohio
Filer & Stowell Mfg. Co., Milwaukee, Wis.
Forest Products Machy. Corp., Salem, Ore.
I. W. Johnson Engineering Co., Tacoma, Wash.
Klamath Iron Works, Klamath Falls, Ore.
Klamath Machine & Locomotive Works, Klamath Falls, Ore.
Mater Machine Works, Corvallis, Ore.
Mill Equipment, Inc., Seattle
Monarch Forge and Machine Works, Portland
The Peters Co., Portland, Ore.
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Prineville Machinery and Supply Co., Prineville, Ore.

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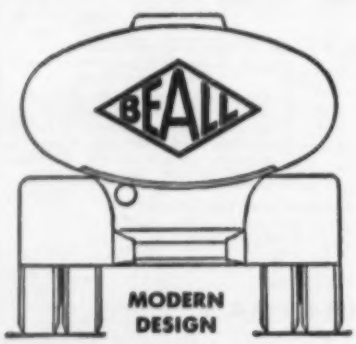

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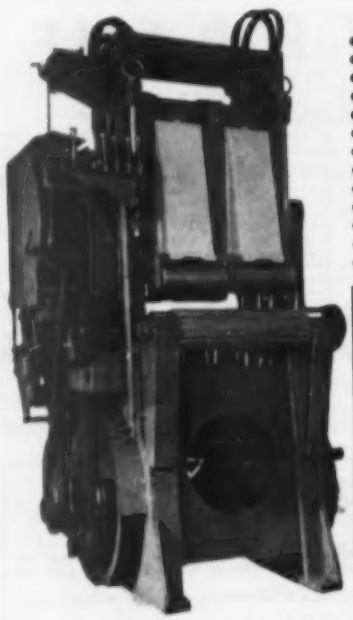

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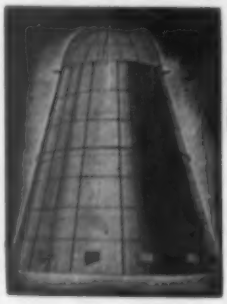

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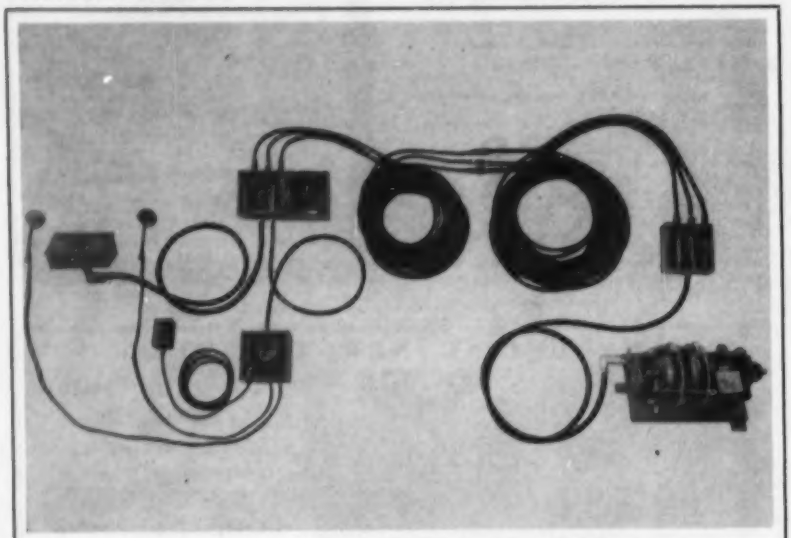

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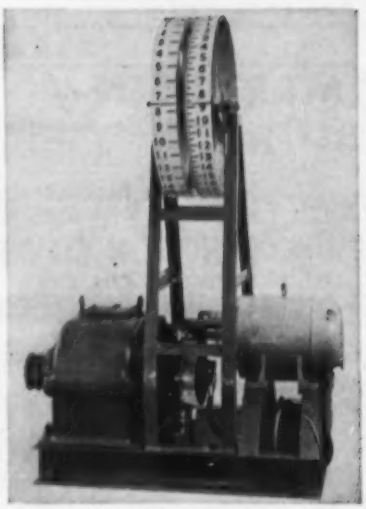

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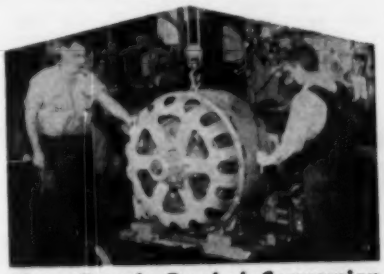
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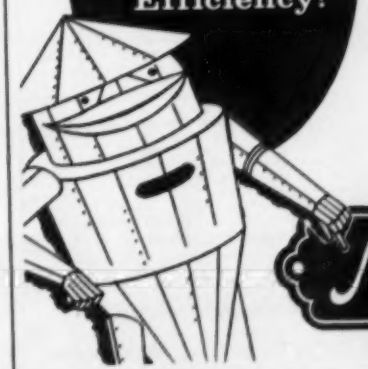
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Wagner Tractor Co., Portland, Ore.

TRAILERS, log and lumber
Beall Pipe & Tank Co., Portland
Freuhauf Trailer Co., Detroit; Seattle; Portland
Peerless Trailer & Truck Service, Portland
Reliance Trailer & Truck Co., San Francisco
Trailmobile, Inc., Cincinnati, Ohio
Utility Trailer Mfg. Co., Los Angeles; San Francisco; Sacramento; Portland; Spokane; Denver
Wentworth & Irwin, Inc., Portland, Ore.

TRIMMERS
Albany Machine & Supply, Albany, Ore.
Canadian Sumner Iron Works, Ltd., Vancouver, B. C.
I. W. Johnson Engineering Works, Tacoma
Irvington Machine Works, Portland, Ore.
Turner Machinery Co., San Francisco
Prescott Iron Works, Menominee; Portland
Portland Iron Works, Portland
Stetson-Ross Machine Co., Inc., Seattle
Klamath Iron Works, Klamath Falls, Ore.
Klamath Machine & Locomotive Works, Klamath Falls, Ore.
Sumner Iron Works, Everett, Wash.; Vancouver, B. C.

VALVES, Steam, air, hydraulic
E. C. Davies, Portland, Ore.
Galland-Henning Co., Milwaukee; Portland
Hanna Engineering Works, Chicago
Modernair Corp., San Leandro, Calif.
Valvair Corp., Akron, Ohio
Racine Hydraulics and Machine, Inc., Racine, Wis.
Soule Steam Feed Works, Meridian, Miss.
Vickers, Inc., Detroit; Seattle
Western Machinery Corp., Portland

WELDING ALLOYS and SUPPLIES
General Electric Co., Carboloy Dept., Detroit, Mich.

FOR SALE

1—Carriage & setworks 67" Monarch, 4 block w/twin engine drive

1—14 x 16 twin engine

1—12 x 72 P.C. Allis Edger w/ motor & starting equipment

1—log well hoist complete

1—log loader 28 ft. complete w/ niggers, arms, cylinders

1—6 ft. Mershon LH Resaw

2—Cutoff saws 44" & 38"

1—Steam plant, 3 boiler complete equipment

1—CME Norman 50" chipper

1—trip hammer

1—Forge w/blower & accessories

1—300 amp G. E. Welder

1—50 Ton hydraulic press

***For Complete Information,* Call Mayfair 3-2351, TWX 80, or Write Purchasing Agent.**

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MAIN SAWMILL

Log Haul, 1¾" x 10", 431'
Log Kicker, 16" x 36" cyl., 4 arms
Log Stop, 18" x 22" cyl., 3 arms
2—Log Turners, 12" x 84" cyls. 5 15/16" x 33'
Lift skids, 12" x 24" cyl.
Carriage, 72" screw blocks with snubbers
Feed engine, 14" x 18", camel back
9' band mill, Allis R.H. or L.H.
10' band mill, Allis R.B. type B
Band drive, 300 HP, 600 RPM, 3 bearing
Pony feed, 14" x 18" direct
Pony mill, 8' Allis R.B.
Pony drive, 200 HP, 505 RPM, 3 bearing
Edger, 8 x 66 R.B. Prescott
Slasher, 10 saw with 75 HP motor
2 Trimmers, 42' Allis air with 100 HP motor
2 Resaws, 84" Merson. L.H.
Bolter Saw, mfgd. Portland Iron Works
Sliding saw, 48" circ. saw with 15 HP motor
#150 L Covel grinder, with 72" clamp
#95 Covel circular saw grinder
#271 Covel band saw, motorized grinder with 72" clamp and stands.

PLANING MILL

#94 Berlin, 6x9 6 knife planer
#17A1 Stetson Ross 6 x 15 planer 8 & 10 knife, 505 E feed table
Swede manufactured by Moore
Knife Grinder, "Dependable" 99A5-36
1—404 B 6 x 15 Woods planer, 6 knife double profile
1—080 Archer exhauster fan

MISCELLANEOUS

3—200 KVA transformers 2300/440/220 V
Ray burner 400 HP, turbine driven
24" G & E crank pin shaper
100 lb. Little Giant power hammer
300 lb. steam hammer
50 lb. "Modern" power hammer
860'—1⅛" strand trans. rope, new
671 GMC diesel 200 HP
Cummins diesel mod. HBI 150 HP
3 shingle machines, Sumner Standard
1000' H82 malleable chain
1 complete dry kiln with fans 20' x 80'
1 Berlin circular power rip saw
7—36" new trimmer saws, "Atkins"
7—36" new slasher saws, "Atkins"
130'—H-112 box chain, new
200'—H-480 used chain
40 kegs 10 d common nails
Delta table saw with ½ HP 440 V motor

YARD EQUIPMENT

Stiff leg crane, 60' steel boom
Brute Crane, 80' boom, 4 ton capacity
Hyster M2 carrier, 42" package
Hyster M3 carrier, 42" package
Hyster MH4564 carrier, 42" package

CALL or WRITE GOLDSTEIN & BLOCH Aberdeen, Washington

Industrial Air Products Co., Portland; Seattle; Spokane
Linde Air Products Co., Indianapolis, Ind.
Stoody Company, Whittier, Calif.

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Douglas-Guardian Warehouse Corp., New Orleans; Portland; San Francisco; Atlanta, Ga.; Dallas, Texas
Walter E. Heller & Co., Chicago
Lawrence Warehouse Co., San Francisco

WINCHES

Ohio Hoist & Manufacturing Co., Cleveland, Ohio; San Francisco
Hyster Company, Portland, Ore.
Pacific Car & Foundry Co., Renton, Wash.; Chicago
Power Machinery Ltd., Vancouver, B. C.
Tulsa Winch Div. of Vickers, Inc., Tulsa, Okla.

WOOD DOUGH

Longview Paint & Varnish Co., Longview, Wash.
Wall-Western Co., Portland

WOOD PIPE

Federal Pipe & Tank Co., Seattle

WOOD PRESERVATIVES

Chapman Chemical Co., Memphis, Tenn.; Portland; Palo Alto, Calif.
Chemical Division, Koppers Corp., Pittsburgh, Pa.; San Francisco; Houston, Texas; Chicago
Dow Chemical Co., Midland, Mich.; Seattle
Monsanto Chemical Co., St. Louis, Mo.; Seattle
Reichhold Chemical Co., White Plains, New York; Seattle; San Francisco; Port Moody, B. C.
West Coast Wood Preserving Co., Seattle
Wood Treating Chemicals Co., St. Louis, Mo.; Portland
J. B. Ford Division, Wyandotte Chemicals Corp., Wyandotte, Mich.

WOODWORKING MACHINERY

Ekstrom, Carlson & Co., Rockford, Ill.
Idaco Engineering & Equipment Co., Oakland, Calif.
Greenlee Bros. & Co., Rockford, Ill.
Onsrud Machine Works, Inc., Chicago
C. L. Porter Machinery Co., Grand Rapids, Mich.
B. M. Root Company, York, Pa.
H. B. Smith Machine Co., Smithville, N. J.
Stetson-Ross Machine Co., Seattle, Wash.
The Tannewitz Works, Grand Rapids, Mich.
S. A. Woods Machine Co., Boston, Mass.; Portland, Ore.
Wyson & Miles Co., Greensboro, N. C.

WRAPPING MACHINES and EQUIPMENT

Pierce Wrapping Machine Co., La Grange, Ill.
Coast Iron Works, Tacoma

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LIQUIDATION SALE

FOR THE OWNERS OF

Myrtle Creek Plant of UMPQUA PLYWOOD CORP.

Sawmill, Power Plant, and Planing Mill at discontinued operation in MYRTLE CREEK, ORE. They want this equipment sold quickly. REAL BARGAINS IN GOOD MOTORS, SAWMILL MACHINERY AND RESAWS.

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TURBINES

IN OUR PORTLAND STOCK

1—WESTINGHOUSE PARSONS single flow steam turbine, #2095, 3600 RPM Complete with governor with valve gear 164.7 oscillations per minute. 8" throttle valve

Direct connected to: Westinghouse Turbo-Generator A. C. 1500 KVA 2400 —volt 360 amps terminal 3 phase, 60 cycle Ser. #969329.

Direct connected to Westinghouse DC generator (exciter) 25 KW, 125-v, 200 amps, 3600 RPM, Ser. #969331. Complete with control panel.

Motor generator set (standby exciter): 25 H. P. General Electric Type KT 440-volt, 1200 RPM electric motor direct connected to S & W 15 KW DC generator, Ser. #60676, 120 - v, 125 amps, 1150 RPM.

Condenser: Westinghouse (Leblanc) Size 11, Ser. #411, low level jet condenser, direct connected to Westinghouse 75 H. P. 1500 RPM Ser. #1292, steam turbine pump.
Complete with **panel and control equipment.**

BOILER:

B & W 660 H. P. integral furnace type—heating surface 6607 sq. ft., 250 lb.—70,000 lbs. steam per hr. New in 1946, Nat. Bd. No. 15170 Ser. F1152—complete as installed with 3-cell dutch oven
Induced draft: Claridge induced draft fan with both steam turbine and electric motor drive—67.5 H. P. 5360 RPM, Size 22-2-½ complete as installed.
Boiler Feed Pumps: 2 electric driven Centrifugal, 2 stage boiler feed pumps, 3" suction, 2" discharge, 50 H. P. motor, 3600 RPM
1—STEAM TURBINE driven centrifugar 2 stage boiler feed pump, 3" suction, 2" discharge, 50 H. P., 3600 RPM
Water Conditioner: 1 Cochrane water softener, capacity 5800 gal.

STEAM TURBINE GENERATOR:

Generator G. E. Co. 2000 KW, 2500 KVA, Type ATB, No. 636438 —P. F. 80%—Class 2, 3 phase, 60 cycle, 480-volt, 3600 RPM, 3000 amps — Turbine Curtis 200# — equipped with stainless steel blading installed in 1944, operated about 5 years. Generator stator removed and completely re-insulated and field insulation reconditioned and balanced in 1952. Complete installation with Wheeler 6000 sq. ft. surface condenser with 60 H. P. 12" circulating pump—
15 H. P. 3" condensate removal pump, steam driven G. E. exciter 35 KW, motor driven 25 KW Westinghouse exciter, Loomis Marine type air ejector (new 1949) complete with instrument panel, pipe fittings, etc., complete unit where is, as is present location Myrtle Creek, Oregon—

STEAM TURBINE GENERATOR:

Generator Allis Chalmers, 750 KW, 3 phase 60 cycle, 480 volt, 3600 RPM, 1125 amps. Ser. #100-592—Allis turbine 175 lb. complete with Graham, 1500 sq. ft. surface condenser 50 H. P. electric driven 8" centrifugal circulating pump, 1 electric driven condensate pump 3" with 7½ H. P. motor—steam driven Westinghouse 25 KW marine type exciter—2 steam turbine driven cold water pumps 750 GPM all complete with switchboard control, piping valves, etc., as is where is present location Myrtle Creek, Oregon—

PLANER (NEW 1954):

Item No. PM-2: Planer—Stetson Ross, Model 6-12-C1, Ser. No. 3271, 12-knife, 8" x 15"
Power: Top head, 130 H. P.
Bottom head, 65 H. P.
Inside side head, 40 H. P.
Outside side head, 65 H. P.
Top profile, 65 H. P.
Bottom profile, 25 H. P.
Complete panel board
Feed table, Stetson-Ross No. 503 AF—24' x 30"
Feed on planer and on planer feed table driven by individual DC motors with variable speed control
Feed motor on planer is 50 H. P. 1200 RPM DC
Motor on feed table is 15 H. P. 2000 RPM DC
Motor generator set for two above motors is 75 H. P. 3 phase, 60 cycle, 440-volt motor direct connected to 60 KW DC generator set.

ALL MOTORS ARE
3 phase 60 cycle 440-volt

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References supplied
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Phone: CApitol 8-5652

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Plant Superintendent to take complete charge of production and management of modern wood-working plant. Must be production man or do not apply. Prefer man who has had experience with electronic gluing equipment. Salary open. Give complete details first letter.
ROBERTSON AND COMPANY
P. O. Box 688, Moberly, Missouri

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Exceptional opportunity with large Deep South pine sawmill, with perpetual cut from its own timberlands. This is a top management position. Only well qualified individuals need apply. Write TL Box 204, c/o THE LUMBERMAN, 519 S. W. Alder St., Portland 5, Oregon.

FOR SALE

Our Sawmill Proper, Complete, at Bemidji

Constructed on good concrete footings but can be quite easily dismantled and moved intact. This mill described briefly as follows: A No. 4 Carley 3 block carriage, Carley setworks complete with arbor mounted on three roller bearings powered by 75 h. p. 2300-volt electric motor, together with all starter boxes, switches. Approximately 200 feet of bull chain complete with the clutch assembly, individually motored, 5-inch belt feed works, live rolls, new Carley edger, new Carley double end trimmer. Approximately 70 feet of triple sorting chain, new. No. 35 Diamond hog complete with heavy conveyor running into the hog and new conveyor running out of the hog into the bin. Permanently mounted top saw arbor, V-belt drives. 11 solid tooth Atkins saws. Desire to dispose of the entire complete sawmill as a unit, which includes all saws, motors, filing equipment, etc. Located on Great Northern spur.

Real Estate Sales Company
Office: 219 Bemidji Ave., Bemidji, Minnesota
Phone 133

WANTED

Used knife grinder suitable for grinding Diamond 45 hog knives. Write P. O. Box 1474, Spokane, Washington.

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Certified Wholesale Sporting Goods, Outdoor Clothing, Fishing Tackle, Hunting Equipment, General Merchandise catalog available Sept. 10th. Write for your free copy now! Voedisch Bros., 1639 N. Wells, Chicago, Ill.

ACCOUNTANT

Thoroughly experienced in all departments of plywood manufacturing, sales, financial statements, costs and production reports. References. Write TL Box 214, c/o THE LUMBERMAN, 519 S. W. Park Avenue, Portland 5, Oregon.

FOR SALE

75 Million feet timber, 70% fir, 30% pine. Band mill, dry kilns. About 1 billion feet private timber available. On West Coast. Write TL Box 212, c/o THE LUMBERMAN, 519 S. W. Park Avenue, Portland 5, Oregon.

FOR SALE

2 Case skiploaders, 5/8-yd. bucket, excellent condition. Must sacrifice. Herwood Building Supplies, 24500 So. Normandie, Harbor City, California. Phone DAvenport 6-5146.

Position wanted in Latin America. Speak Spanish fluently Experienced in personnel management, sawmill and jungle logging. Best references. Write TL Box 216, c/o THE LUMBERMAN, 519 S. W. Park Ave., Portland 5, Oregon.

FOR SALE

One Used 6 ft. Prescott Splitter. Very good condition. Thiem Products, Inc., 9800 W. Rogers Street, Milwaukee 19, Wisconsin.

SANDER WANTED

68 to 71 inches wide—1 to 2 drum sander, recent model. Write to:
BELLERIVE VENEER & PLYWOODS LTD.
Mont-Laurier, Prov. Que., Canada

DO YOU NEED SALES!

Opportunity Wanted

Would like to demonstrate ability to perform. Offer 15 years experience in hardboard and particle board sales, promotion and market analysis. Wide acquaintance among jobbers and all principal trade factors in the West. Write TL Box 213, c/o THE LUMBERMAN, 519 S. W. Park Avenue, Portland 5, Oregon.

FOR SALE

As is—where is—practically new 1952 Model Turner R-42 left hand tandem twin band resaw with 42" x 5" wheels with two 30 HP, 3 phase, 60 cycle, 220/440 volt drive motors including sheaves, V-belts, 3 saws, sheet metal guards. Serial #N83773. One Ripping attachment for above with 15 HP, 3 phase, 60 cycle, 220/440 volt drive motor including two self centering collars and one quick change sleeve with spacers. One Matteson #9 left hand resaw grinder for above with ¾ HP, 3 phase, 60 cycle, 220/440 volt drive motor. Terms can be arranged. Contact Mr. Johnston, Manager, Moyie River Lumber Company, Moyie Springs, Idaho. Telephone Bonners Ferry Andrews 7-5271.

VIRGIN PINE TIMBER

100,000 acres virgin pine, and oak. Will cut 20 million pine board feet annually, plus secondary products, according to Engineers reports. Cutting permit and export permit of products furnished. Elevation 7700' Durango, Mexico. M. E. Bogle, 527 Ogden St., San Antonio, Texas, CA 6-9500.

EXPERIENCED SAWMILL OPERATING MANAGER

Available October 1

Have had overall experience as owner and manager in low cost operation in all phases, pine and fir. Background includes successful national lumber sales experience in both species. Prefer locate Arizona, California or New Mexico, but will go anywhere. Write TL Box 215, c/o THE LUMBERMAN, 519 S. W. Park Avenue, Portland 5, Oregon.

SEALED BIDS, in duplicate, on forms provided therefor, marked outside, "Bid, Little Nespelem Creek Logging Unit", and addressed to the Superintendent, Colville Indian Agency, Nespelem, Washington, will be received until 2:00 p. m., Pacific Standard Time, October 1, 1957, for the purchase of merchantable timber located on tribal lands and Indian trust allotments, contained within a tract on the Colville Indian Reservation described as the Little Nespelem Creek Logging Unit. The Unit includes about 3,491 acres of timber land with a total estimated stand to be cut, which is not guaranteed, of approximately 10,000,000 feet, board measure, of ponderosa pine and approximately 1,000,000 feet, board measure, of Douglas-fir and other species, of which approximately 700,000 feet, board measure, of ponderosa pine and 100,000 feet, board measure, of Douglas-fir and other species are located on about 250 acres of trust allotted land for which separate approved contracts must afterward be made with allottees desiring to sell and on terms similar to the contract for the unallotted timber. Each bidder must state the price per thousand feet, board measure, Scribner Decimal C Log Scale, that will be paid for timber cut prior to any adjustment of rates as specified in the contract. No bid will be considered for less than $33.50 per thousand feet, board measure, for ponderosa pine, or $13.00 per thousand feet, board measure, for Douglas-fir and other species. A certified check for twenty thousand dollars ($20,000) on a solvent bank, payable to the Bureau of Indian Affairs, must accompany each bid. Persons bidding for or on behalf of companies, corporations, or partnerships, must at the time of bidding, submit in writing satisfactory evidence of their authority to do so. The deposits of the unsuccessful bidders will be returned after the successful bid has been accepted by the Area Director. The deposit of the successful bidder will be applied as part of the purchase price against timber cut on this unit only, or retained as liquidated damages if the bidder shall not execute the contract and furnish a satisfactory bond for twenty thousand dollars ($20,000) within sixty days of the acceptance of his bid. The right to waive technical defects and to reject any and all bids is reserved. The contract will specify that all designated timber shall be cut and paid for prior to December 31, 1961, and that all slash will be burned and snags fell prior to December 31, 1962. Advance payments must be made within thirty days of approval of each individual allotment contract. Before bids are submitted, full information concerning the timber, the conditions of the sale, and the submission of bids should be obtained from the Superintendent, Colville Indian Agency, Nespelem, Washington; or the Area Director, Bureau of Indian Affairs, Post Office Box 4097, Portland 8, Oregon. Dated this 13th day of August, 1957, at Portland, Oregon. Perry E. Skarra, Acting Area Director.

MANAGER AVAILABLE

Experienced in all phases of logging, timber purchases, lumber manufacture, sales, labor problems, etc. Can get top production and control costs. References. Write TL Box 218, c/o THE LUMBERMAN, 519 S W. Park Avenue, Portland 5, Oregon.

AVAILABLE

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LUMBER ACCOUNTANT—OFFICE MGR. Thoroughly experienced in all phases of office work from log purchases through cost and financial statements. Excellent references. Please write TL Box 217, c/o THE LUMBERMAN, 519 S. W. Park Ave., Portland 5, Oregon, or phone Packwood, Washington 2252.

Complete planer mill and lumber yard for sale middle Georgia; 10 million feet pine timber. Buy planer & sawmill only, both in good condition. Only $16,000.00 cash required, pay for as timber cut. Write TL Box 219, c/o THE LUMBERMAN, 519 S.W. Park Avenue, Portland 5, Oregon.

FOR SALE

Available for immediate delivery

Cos DD-60 x 66" Motorized Lathe
Cos Model 328A - 66" Clipper
66" x 15' Gravity Table
Cos Model 431 - 88" Grinder
Cos 8 section, 3 line Dryer—latest design
60 HP, 4-speed motor and controls
Moreen - Johnson #460 Cut-Off Saw
Moreen - Johnson #441 Gang Rip Saw
Moreen - Johnson #600 Cleat Tenoner

These machines were purchased for specific purpose of manufacturing wire bound boxes under the process developed by Stapling Machine Co., Rockaway, New Jersey.

Machinery is in excellent condition. For further information contact United States Machinery Co., Inc., 90 Broad St., N.Y. 4, N.Y.

Written offers be directed to H. S. Kebala Ltd., P.O. Box 595, Port of Spain, Trinidad, B.W.I.

Sawmill Machinery For Sale

2—20 ft. undercut model Prineville trimmers, 11 saw machines complete with electric drive motors—electric solenoid valves, extra saws— 1 planing mill type and 1 sawmill type—new—never been used—save over $3000.00 on new price.

2—7 ft. Klamath Band mills, roller bearing—1 RH & 1 LH.

1—12" x 36' steam shotgun

2—10" x 36' steam shotguns

1—5" x 48 Klamath edger with motor and saws

2—3 arm log stop and loaders

Miscellaneous conveyors—rolls—loghauls and carriages. From two band mills and 1 circular mill.

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For Sale—8 & 9 Ton Lift Trucks

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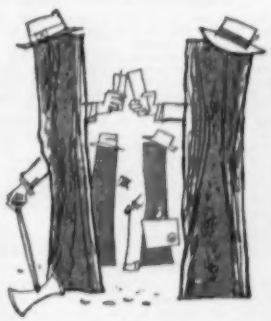

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helps the small and medium size sawmill to make a profit through GREATER PRODUCTION without increased expense.

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Used 4" x 30" Enterprise 3 saw table edger
Used 4" x 32" Wheland 3 saw BB table edger
Used 4" x 32" American 3 saw stub edger
Used 4" x 36" Newport BB table edger
Used 4" x 42" Newport BB stub edger
Used 6" x 30" Heaps stub edger
Used 6" x 42" Berlin 4 gang stub edger
New 6" x 54" Schorman—Latest Model
Used 6" x 60" LH table edger BB
Used 6" x 60" Salem late gang edger—Divided Rolls
Used 8" x 48" Evergreen BB dbbl roll stub edger
Used 8" x 60" Allis LH roller brg. stub edger
Used 8" x 60" Grays Harbor anti-friction edger
Used 12" x 72" Sumner, split rolls—200 h.p. motor
Used 12" x 84" Sumner Edger

HOGS AND CHIPPERS

New Diamond No. 23 hog
New Diamond No. 135 hog
New Diamond No. 145 hog
New Diamond No. 165 hog
Used No. 35 Diamond Hog
Used No. 38 Diamond Hog
Used No. 35 Puget Sound Hog
Used No. 40 Diamond Hog
Used No. 45 Diamond Hog
Used No. 45 Puget Sound BB hog
Used No. 35 Diamond Chipmill, roller bearing
New No. 145 Diamond Chipmill, roller bearing
New 48" Chipmaster for slabs, roller bearing
Used 66" Sumner Chipper—roller bearing
Used 64" Hesse-Ersted 4-knife BB Chipper
Used 72" 3-knife chipper—Bargain Price

PLANERS—MOULDERS—SURFACERS

Used 500 Newman 6 x 14 6 knife planer—Like New!
Used 12 American 12 x 20 Sizer 6 knife BB with all auxiliary equipment
Used 404DM Sawoods 6 x 15 8 knife steel. planer
Used 7A Stetson Ross 6 x 15 10 knife steel.
Used 77A American 6 x 15 8 knife BB planer
Used 608 S. A. Woods 6 x 24 8 knife planer
Used 99 Newman 6 x 15 6 knife planer
New BB Marathon 4 x 13 4 knife BB planer
Used 100 Heaps 5 x 15 BB pony planer
Used 10 Yates 10 x 30 4 knife sizer
Used 4" Englefield H. frequency moulder
Used 4"xL Smithway steel. moulder
Used 4" Beaford Premier steel. moulder
Used 969 Fay & Egan steel. moulder matcher
Used CBB Yates-American moulder
Used 8 x 36 Whitney single surfacer
Used 5 x 25 Hermance single surfacer

RESAWS & RIP SAWS

Used 54" Mershon, anti-friction brg. tilt rolls
Used 54" Berlin resaw, screw set
Used 36" No. 2 Fay & Egan BB circular resaw
Used 40" L. A. Fay & Egan band rip saw
Used 42" Cordesman band resaw
Used 40" No. 4 Band scroll resaw
Used & H-6 Yates 72" horizontal band resaw
Used No. V-6 Yates 72" heavy duty band resaw
Used 84" Mershon resaw, sawmill type, quick set
Used No. 0 American rip saw
Used 490 Fay & Egan single surfacer
Used planer feed table

NEW AND USED PUMPS

New 6 x 4 x 6 Worthington Duplex boiler feed
Used Worthington 4" Centrifugal—1000 GPM
Underwriter approved Firepumps—many sizes
Boiler water feed pumps—New & Used
Used 5" x 6" Fairbanks Centrifugal pump—500 GPM
Used 12" x 12" Westinghouse Centrifugal pump—3000 GPM
Used 8" Jeanesville 2 stage Centrifugal pump—2000 GPM

COMPRESSORS

33 cu. ft. New Worthington air cooled
43 cu. ft. New Worthington air cooled
65 cu. ft. New Worthington air cooled
122 cu. ft. Used Worthington air cooled
194 cu. ft. New Worthington air cooled
198 cu. ft. Used Sullivan air cooled
311 cu. ft. Used Ingersoll Rand water cooled
324 cu. ft. Used Ingersoll Rand water cooled
465 cu. ft. New Worthington water cooled
500 cu. ft. Used Worthington water cooled
500 cu. ft. Used Ingersoll Rand water cooled
600 cu. ft. Used Jaeger air cooled
750 cu. ft Used Chicago Pneumatic water cooled

We are Now Distributors for
BROOK MOTORS
The World's Most Respected Motors
All types—All Sizes to 500 HP—In Stock

HOISTS AND CRANES

Used American dbl. drum 24 x 24, 40 HP
New Budgit hoists in stock
2 ton and 5 ton hand winches in stock

SHOP TOOLS

Used Oster pipe & bolt threader
Radial drill
American radial drill
8 x 16 Racine hydraulic hack saw
Kempsmith geared Maximaster
10 x 36 quick change lathe

FEED WORKS

New Gardner Hydraulic Shotgun Feed—no order
Used Wheland 5" belt feed
Used 5 x 6 SpeeDee Twin feed
Used 16 x 18 Allis steam twin feed, self-contained
Used 3" hydraulic shotgun

LOG AND CANT GANGS

Used 28" Webrhahn Log Gang, air carriage
Used 34" Mill Engineering log gang, air carriage
Used 48" Wicks cant gang
Used 20" Marathon cant gang, like new
New 20" Marathon cant gang
New 20" Marathon for logs or cants
New 28" Marathon No. 300 for logs and cants
New 28" Marathon No. 400 divided roll cant gang
New 28" Linck gang saw

FILING ROOM EQUIPMENT

New Armstrong No. 4 Stretcher Roll
New Armstrong No. 4 Band Saw Grinder
New Armstrong No. 54 Circular Saw Gummer
Used Armstrong No. 6 Band Saw Grinder
Used Armstrong No. 16 Circular Saw Grinder
Used Covel No. 140 automatic Band Saw Grinder
Used Covel No. 83 24" Gang Saw Grinder
Used Covel No. 217 RH Band Saw Grinder
Used Covel No. 150 RH Band Saw Grinder
Used Covel No. 100 Stretcher Roll 16" capacity
Used Naschett No. 250 LH Band Saw Grinder
Used Naschett No. 72 36" auto. circular Saw Grinder

HEAD RIGS AND CARRIAGES

Used 6' Union Iron Works band mill
Used 54' Allis Chalmers Band Headrig—anti-friction
Used 6' Yates band mill, all cast, LH
Used 8' McDonough bandmill
Used 18' Monarch 3-block carriage Andrus set.
Used 16', 3-block 56" opening steel carriage
Used 18' Monarch 3-block 54" opening steel carriage
Used 14' International 3-block 52" opening steel carriage
Used 18' fabricated 3-block 60" opening steel carriage
Used 8' fabricated 3-block 32" opening steel carriage

KNIFE GRINDERS

Used 36" Fay & Egan No. 253 automatic knife grinder
Used American 30" knife grinder
Used American 32" straight wheel knife grinder
New Dependable No. 99A5 36" motor drive, automatic knife grinder
New Dependable No. 101A sidehead grinder
New Defiance 38" motorized automatic knife grinder
Used Berlin 275—36" Automatic knife grinder
Used Dependable 36" knife grinder, cup wheel
Used Hanchett 36" knife grinder, cup wheel
Used S. A. Wood #226 Automatic 36" Knife Grinder
Used Newman Sidehead Grinder

MILL EQUIPMENT

Used BeGo Hydraulic log turner
New Crescent Lumber Harvester—on wheels
Used Carnith 1 man, 2 saw trimmer, 8' to 20'
New Wheland 1 man, 2 saw trimmer, steel. shift
Used 2-arm Log Stop & Loader, 36" arm, 12 x 16 cyl.
Used 3-arm Log Stop & Loader, 42" arm, 16 x 20 cyl.
Used 20' Portland Iron Log Turner
4—Used Gerlinger Carriers 42"
New Willamette Iron Sawmill, Swede
Steel Deck with flippers
Used 10" x 12" fall oscillating Nigger
Used 6" x 8" fall oscillating Nigger for air
Used Simonsen log turner, 12 x 96" cylinder

MISCELLANEOUS

Used Stetson Ross 54" swing saw—BB
Used Hesse-Ersted 6 HP motorized saw arbor
American Columbia 48" oscillating 3 drum sander
Used Irvington 60" arm swing saw
Mereen Johnson 20' precision trim & printer
Used Yates 36"—3 drum sander

LARGE MOTORS

Used 300 HP, 1200 RPM BB Fairbanks Morse
Used 300 HP, 600 RPM GE Slip Ring & Control
Used 250 HP, 600 RPM, West. Slip Ring & Control
Used 200 HP, 1200 RPM SB General Electric
Used 200 HP, 720 RPM SB General Electric
Used 150 HP, 720 RPM SB General Electric
Used 150 HP, 720 RPM SB Westinghouse
New 150 HP, 1200 RPM BB Allis-Chalmers
Used 100 HP, 1800 RPM BB Westinghouse
New 100 HP, 1200 RPM BB Allis-Chalmers
Used 100 HP, 1200 RPM SB Allis-Chalmers
Used 100 HP, 900 RPM SB General Electric
Used 100 HP, 900 RPM SB Fairbanks Morse
Used 100 HP, 720 RPM SB General Electric
Used 75 HP, 1800 RPM SB General Electric
Used 75 HP, 1200 RPM SB Allis-Chalmers
Used 75 HP, 1200 RPM SB Allis-Chalmers
Used 75 HP, 1200 RPM SB General Electric
Used 75 HP, 720 RPM SB Allis-Chalmers
Used 75 HP, 720 RPM, SB General Electric
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*Hi-Hemlock lumber, grown on higher elevations, means lumber of great density and strength.

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Diagonal Planer and Matcher

Choice of 6 to 16-knife machines

- Eliminates End Sniping!
- Smoother Surfaces Around Knots and Cross-Grain!
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- Reduces Side Friction, Feed Roll Wear!

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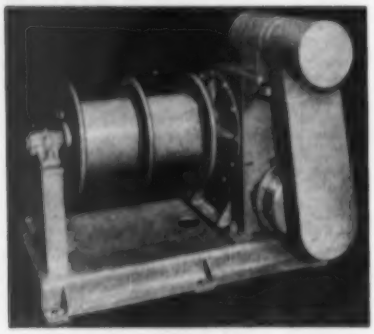
Machinery at Work



Chip Car Oscillator Development Told

• Chip car oscillators utilizing wind-on and wind-off principals with dead ended cables in each respective section of the double drum assembly are available from Western Machinery Corp., Portland, Ore.

The manufacturer says the winding action eliminates cable slip, cable wear and fatigue and friction drum wear and fatigue. The Model D series is available in three sizes of varying cable capacities, engineered with minimum installation and maintenance costs.

Reversing Oil Clutch Development Told

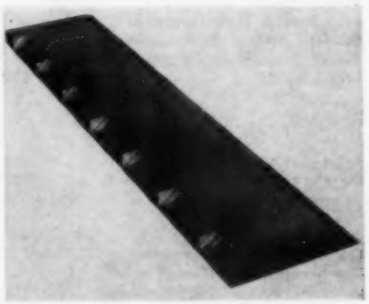
• A variable speed, power shifting full reversing oil clutch has been developed by Thomas Hydraulic Speed Controls, Inc., Wichita, Kan. It is called the ROC, is available in a variety of sizes in packages.

The clutch consists of two vari-hydraulic drives mounted so that the output shaft can be driven in the same direction as the input by the engagement of one drive, or in the reverse direction by engagement of the other drive. Oil is supplied to the units by a separate pump which has ample capacity to provide circulation through an external heat exchanger.

All ROC units are available with high temperature cutoff protection which cuts off the supply oil at oil temperature above 220 degrees fahrenheit.

•

MONARCH FORGE & MACHINE WORKS, Portland, Ore., has installed a specially equipped 9-foot band mill at the Van Vlett Lumber Co., Rainier, Wash. It is specially equipped with shrouds on the upper wheels; shrouds are standard equipment on the lower wheels of Monarch bands. The machine also had a slat-bed feed table to help the tail sawyer keep knots and bark clear of the saw.



Custom Chipper Knives

John W. Bolton & Sons, Inc., Lawrence, Mass., is making available a custom made chipper knife. Before production, the mill's wood room chipping operation is studied to determine material used, chipping objectives and other pertinent information. From this information Bolton determines the metal to use, heat treating cycles and other factors necessary to produce a knife fitting the company's need. All completed Blue Devil knives produced by the firm bear two sets of numbers, the first the manufacturing order number to make possible future orders without variation, the second a key to the individual knife heat treating and quality control record.

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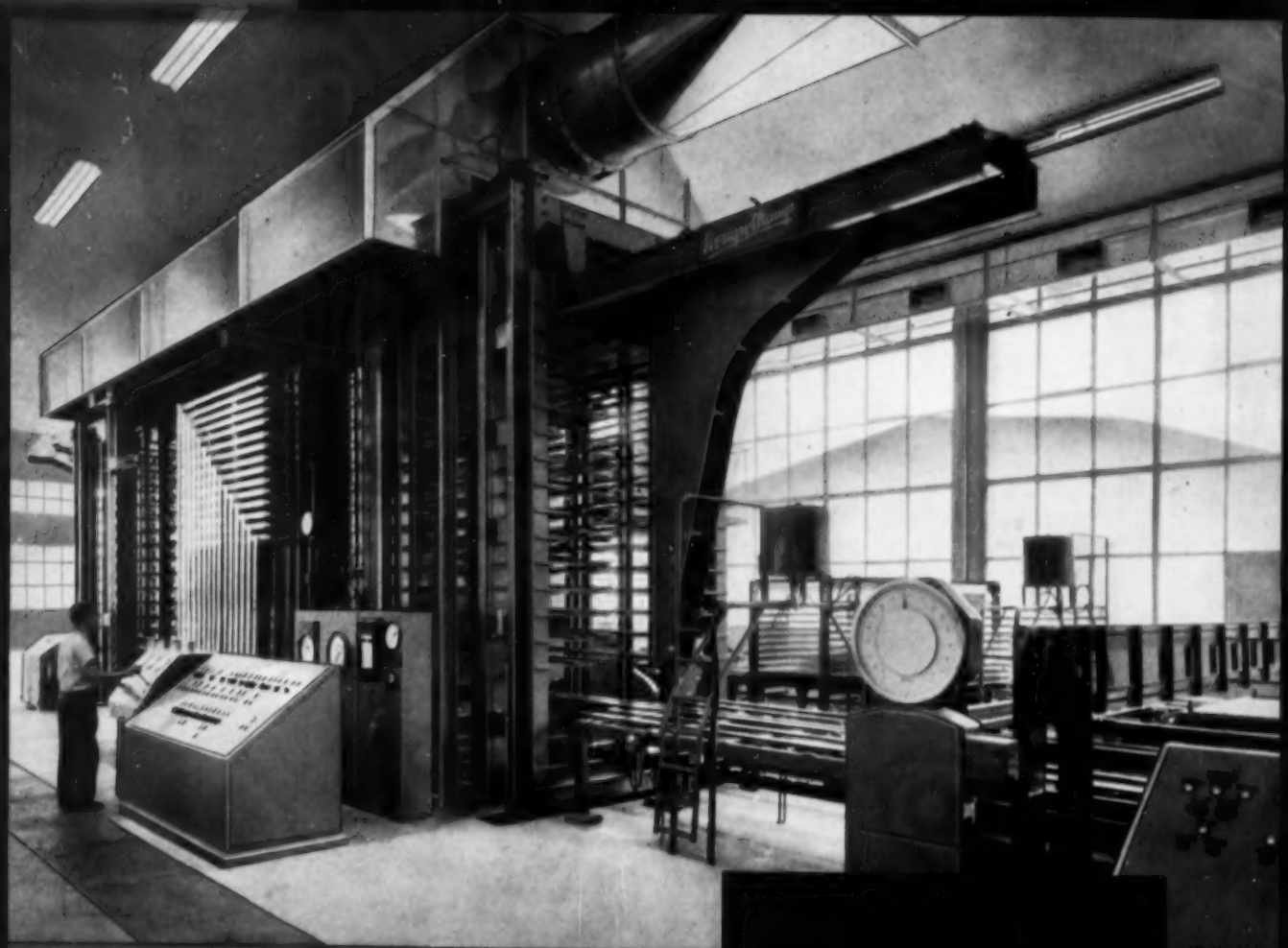
LITERATURE ON REQUEST

REDUCE COSTS with STETSON-ROSS

STETSON-ROSS MACHINE COMPANY



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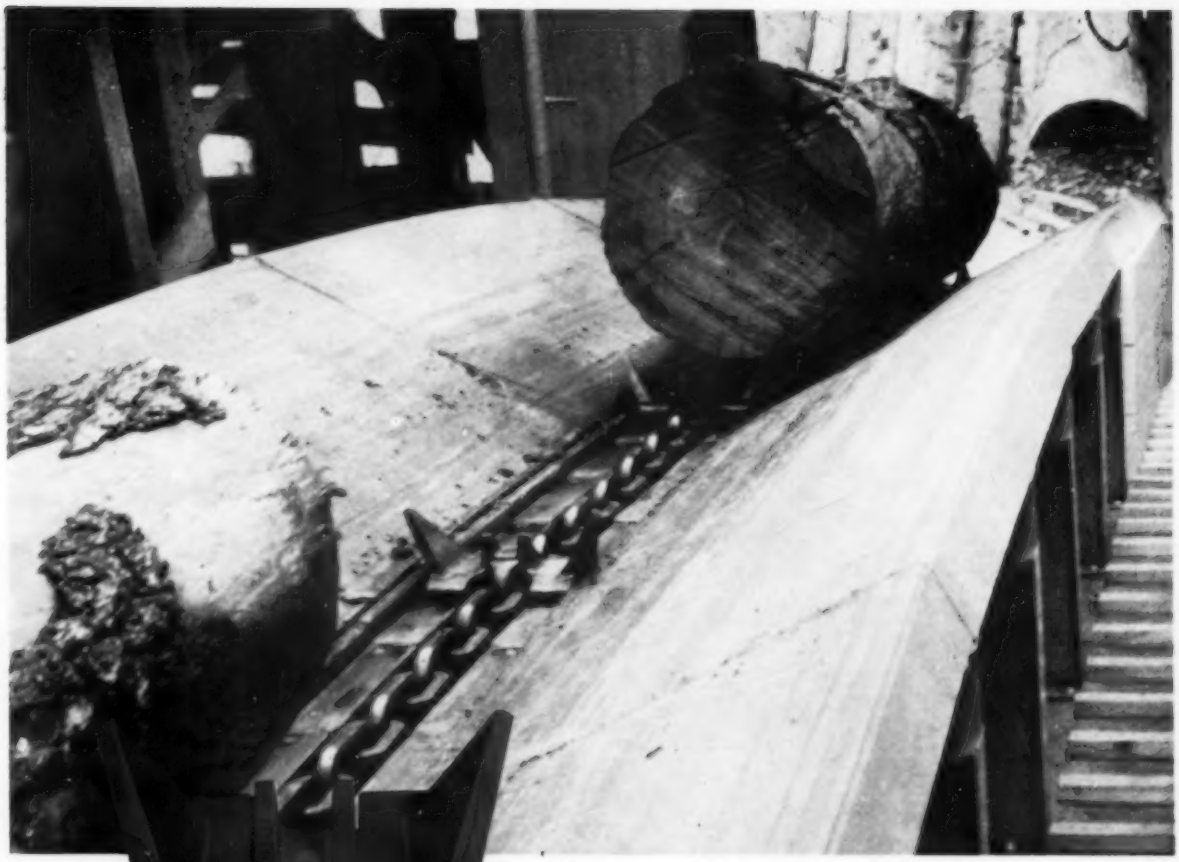

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LOG HAUL CHAINS KEEP LOGS MOVING

LARGE LOGS OR SMALL, straight or crooked, *ESCO* Flare Point Saddle Link Log Haul Chairs handle them all easily, efficiently. Large diameter logs are carried on the outer chair points. Smaller logs are cradled by outer points and carried on inner points. Small logs cannot lodge between chairs and trough sides.

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